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HELMINTHOLOGICAL ABSTRACTS

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Vol. 21, Part 6

1952

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HELMINTHOLOGICAL ABSTRACTS

INCORPORATING BIBLIOGRAPHY OF HELMINTHOLOGY

FOR THE YEAR 1952

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879—Acta Unio Internationalis contra Cancrum. Louvain.

- *a. MAKAR, N., 1952.—“A note on the pathogenesis of cancer of the bilharzial bladder.” 8 (2), 323-332.

880—Acta Veterinaria. Belgrade.

- a. NEVENIĆ, V., 1952.—[La diagnose d'oxyurosis par la célophane adhésive.] 2 (2), 129-131. [In Serbian: French summary p. 131.]
b. NEVENIĆ, V., 1952.—[L'influence physique et chimique des facteurs sur le développement embryonnaire de *Parascaris equorum*.] 2 (2), 205-208. [In Serbian: French summary p. 208.]
c. KOZIĆ, L. & PETROVIĆ, Z., 1952.—[Über eine Invasion des Fohlens mit *Strongyloides westeri* Ihle 1917.] 2 (2), 221-222. [In Serbian: German summary p. 222.]

(880a) When skin scrapings were made from folds in the anal region of 447 horses from around Belgrade, *Oxyuris equi* ova were detected in 56.6%, but when the adhesive cellophane technique was applied ova were found in 61.7%. The latter method was very easy
R.T.L.

(880b) Neither water nor dry conditions are favourable to the development of *Parascaris equorum* ova. They develop rapidly under moderately humid conditions. Indirect sunlight and quartz lamp rays kill the ova and larvae. 37°C. is the most optimum temperature for their development which starts only at 7°C. and ceases at 41°C. Both ova and larvae are very resistant to low temperatures. 5% lysol was the most lethal of the chemicals used. R.T.L.

(880c) It is assumed that a heavy infection with *Strongyloides westeri* found in a foal on the Government Agricultural Estate at Novi Sad was imported into Yugoslavia with UNRRA horses from the U.S.A.
R.T.L.

881—Agricoltura Napoletana.

- *a. PALOMBI, A., 1952.—[Parasitic celworms of plants, their biology and control.] 19 (10), 5-8. [In Italian.]

882—Anales de la Facultad de Medicina. Universidad de Lima.

- a. PESCHIERA, C. A. & BAZÁN, J., 1952.—“Las resecciones pulmonares en el tratamiento de los quistes hidáticos del pulmón. Estudio sobre 70 casos operados.” 35 (4), 395-410.

883—Archiv für Experimentelle Veterinärmedizin.

- a. KETZ, H. A., 1952.—“Über Trichinenfütterungsversuche beim Syrischen Goldhamster.” 6 (4), 262-271.

(883a) Ketz reports that the golden hamster, *Mesocricetus auratus*, is a suitable experimental animal for *Trichinella* and will provide specimens of all developmental stages for teaching purposes. Hamsters readily eat infected meat (the optimal dose varied between 0.1 and 0.3 gm. according to the severity of infection) and are cheaper than guinea-pigs both to buy and to maintain.
A.E.F.

* Titles so marked throughout this number have not been seen in the original.

884—Archiv für Klinische Chirurgie vereinigt mit Deutsche Zeitschrift für Chirurgie.

- a. DIETHELM, L., HEUCK, F. & KLOOS, K., 1952.—“Die Ascariasis und ihre pathogenetische Bedeutung für schwere hämorrhagische Darmveränderungen.” 274 (1), 24–61.

(884a) Of 51 cases of severe acute intestinal disturbance with haemorrhage, nine were found to have *Ascaris* infection. These findings led Diethelm *et al.* to make a study of the pathogenic significance of ascariasis in such conditions. Injection of whole ascaris extract into sensitized rabbits and guinea-pigs produced changes in the intestines corresponding to those observed in man. This demonstration that an allergic reaction is probably the basis of the intestinal disturbances led to attempts at treatment with antihistamines, to which experimental animals and a single human case responded well. A.E.F.

885—Arizona Farmer.

- *a. DOUGLAS, E., 1952.—“Nematode nuisance becomes a menace; harder and harder to get good cotton stands and yields as eelworm infestations spread.” 31 (15), 1, 14–15.

886—Årsskrift. Kalmar Läns Södra Hushållningssällskap.

- a. HAEGERMARK, U., 1952.—“Något om nematodangrepp på kulturväxter.” Year 1952, pp. 134–139.

(886a) Following a popular description of the sugar-beet nematode, *Heterodera schachtii*, and the disease caused by this parasite, most of the paper is devoted to a discussion of stem nematodes, *Ditylenchus dipsaci*, in onions. This is a dangerous parasite on the island of Öland where onions are grown to a considerable extent. Haegermark found in 1951 that the stem nematode occurred on one-seventh or one-eighth of all the farms which grow onions. To control the parasite clean seed and crop rotation are recommended. S.B.

887—Arzneimittel-Forschung. Aulendorf.

- a. SEELKOPF, K. & GRAF, E., 1952.—“Semen Cucurbitae als Bandwurmmittel.” 2 (8), 352–355.
b. BOECKER, H., 1952.—“Die Larven der Oxyuren und ihre Bedeutung für die Therapie. Zur Pharmakotherapie der Oxyuriasis. V.” 2 (8), 378–381.

(887a) Although Seelkopf & Graf were able to confirm the findings of earlier workers that extracts of pumpkin seeds were effective *in vitro* against *Tubifex rivulorum* and *Lumbricus terrestris* they were unable to record any success from *in vivo* tests against *Hymenolepis diminuta* in rats. Various methods of extraction were tried with seeds from different countries but all were equally ineffective. The authors conclude that pumpkin seed extract cannot be regarded as an efficient anthelmintic. A.E.F.

(887b) Boecker points out the value of experimental infections with *Passalurus ambiguus* in rabbits as a means of elucidating problems in the bionomics and treatment of *Enterobius* infection in man. He discusses the relation of bionomics to treatment with special reference to the “intramural” larval stages which, after two ecdyses, settle in the folds of the jejunum and upper ileum and are particularly resistant to anthelmintics. Boecker describes his techniques for maintaining supplies of larvae for experimental purposes and gives details of his methods for testing drugs on rabbits. He emphasizes the need for careful timing in the administration of anthelmintics so that efficacy against the various larval and adult stages can be tested. A.E.F.

888—Auburn Veterinarian. Alabama.

- a. BAILEY, W. S. & LOWMAN, C. B., 1952.—“Verminous pneumonia.” 9 (1), 36–38.

(888a) The distribution of *Aelurostrongylus abstrusus*, its known vectors in the U.S.A. and the symptoms as seen in two cats from the region of Newberry, South Carolina are briefly outlined. In the faeces of one case there were approximately 120,000 larvae per gramme. R.T.L.

889—Boletim. Directoria da Produção Animal. Rio Grande do Sul, Brazil.

- *a. CORRÊA, O. & GLOSS, R., 1952.—[Use of sodium fluoride in ascariasis of swine.] 8 (12), 17-27. [In Portuguese.]
- *b. CORRÊA, O. & GLOSS, R., 1952.—[Spontaneous elimination of *Metastrongylus* sp. by swine.] 8 (14), 28-29. [In Portuguese.]

890—Boletín de la Cámara Oficial Sindical Agraria de Barcelona.

- *a. BELTRÁN MONFERRER, J. M., 1952.—"Zoonosis transmisibles a la especie humana: la triquinosis. I." 7, 26-28.

891—Boletín Médico del Hospital Infantil. Mexico.

- a. ANON., 1952.—"Cisticercosis encefálica en un preescolar. Historia clínica condensada." 9 (4), 458-464.

892—Boletín de Sanidad Militar. Mexico.

- *a. NETZAHUALCOYOTL DIAZCONTI, A., 1952.—"Eosinofilometria directa en la oncocerciasis." 5 (51), 211-216.

893—Bulletin de l'Académie Nationale de Médecine. Paris.

- a. TOULANT, P. & BOITHIAS, M., 1952.—"Les lésions du fond d'oeil dans l'onchocercose africaine." 3e Série, 136 (22/23), 378-383.

(893a) Toulant & Boithias describe the various lesions found in the back of the eye in patients with onchocerciasis. They found lesions in the choroid to be the most common. Atrophy of the optic nerve occurred frequently, even when there were very few signs of onchocerciasis, and the authors are of the opinion that the microfilariae are directly responsible for this condition. Treatment is briefly reviewed and the use of tablets of notezine placed in the cul-de-sac of the conjunctiva is suggested. S.W.

894—Bulletin de la Chambre d'Agriculture de Casablanca.

- *a. DEYRAS, O., 1952.—"La cysticercose bovine." 23 (251), 13-14.

895—Bulletin of the Naniwa University. Series B. Agricultural and Natural Science.

- a. NODA, R., 1952.—"On a cat hookworm, *Ancylostoma longespiculatum* Mönnig, 1938." 2, 11-18.

(895a) Noda collected 17 male and 28 female hookworms from four cats. Although very similar to *Ancylostoma caninum* they were smaller, the spicules were longer, the ventral teeth were more strongly developed, the pair of triangular lancets were longer, and the cervical papillae longer than they were wide and sharply pointed. The differences are tabulated and illustrated. The specimens appear to be identical with *A. caninum* var. *longespiculata* Mönnig, 1938 but the author considers the differences to be sufficient to justify the raising of this variety to specific rank as *Ancylostoma longespiculatum*. S.W.

896—Bulletin. Puerto Rico Agricultural Experiment Station, Rio Piedras.

- a. RIVERA ANAYA, J. D. & MARTÍNEZ DE JESÚS, J., 1952.—"The extent of liver-fluke infestation of cattle in Puerto Rico. (A slaughterhouse survey)." No. 107, 16 pp.

(896a) Of 46,565 cattle examined in 38 slaughterhouses in Puerto Rico the livers of 3,515, i.e. 7.55%, were found to be infected with *Fasciola hepatica*: 24.24% were from bulls, 12.26% from bullocks and 63.50% from cows. The incidence by districts, towns and sex and total weight of the condemned livers from each district are tabulated. The weight of condemned livers from the cattle totalled 34,074 lb. R.T.L.

897—Cahiers des Ingénieurs Agronomes.

- *a. COMMUN, L., 1952.—"Insecticides, acaricides et nématocides." 7 (special number), pp. 24-28.

898—Československá Dermatologie.

- *a. HORÁČEK, J., 1952.—“Enterobius, Ascaris a jejich význam v dermatologii.” 27 (1/2), 80–85.

899—Československá Farmacie.

- a. PETRU, M., 1952.—“Chemotherapie helminthiasí a testovací metody pro anthelmintika.” 1 (8), 464–471.
 b. SEKERA, A. & RAHM, J., 1952.—“Přírodní anthelmintika. I. Askaridol.” 1 (8), 471–477.
 c. SEKERA, A. & RAHM, J., 1952.—“Přírodní anthelmintika. II. Santonin.” 1 (10), 594–598.

900—Chacra. Revista Mensual de Agricultura, Ganadería e Industrias Anexas. Buenos Aires.

- *a. GELORMINI, N., 1952.—“Ascaridosis del cerdo.” 22 (260), 40.

901—Cirugía y Cirujanos. Mexico.

- a. LARA D., J., 1952.—“Tratamiento de la oclusión intestinal causada por ascárides lumbricoides.” 20 (10), 455–458.

902—Deutsche Landwirtschaftliche Presse.

- *a. LÜHRS, 1952.—“Bekämpfung des Lungenwurmbefalls beim Rinde.” 75, 74.

903—Deutsche Wirtschaftsgeflügelzucht.

- *a. SPREHN, C., 1952.—“Die Eingeweidewürmer der Hühner (Hühner-Helminthen).” 4, 530–532.

904—Doelmatige Veehouderij.

- *a. HENDRIKSE, D., 1952.—[Lungworm disease of cattle.] 1, 89–92. [In Dutch.]
 *b. HENDRIKSE, D., 1952.—[Liver fluke disease.] 1, 120–123. [In Dutch.]

905—Experimental Report of Government Experimental Station for Animal Hygiene, Tokyo.

- a. SASAKI, N. & ISHITANI, R., 1952.—[Supplementary studies on histopathology of swine kidney worm disease.] No. 25, pp. 121–129. [In Japanese: English summary p. 129.]

(905a) In Japan swine kidney disease known to occur in the Kyushu, Chugoku and Kanto districts has now been found in Hokkaido where the infection reached 65% on the Live Stock Farm of the prefecture. The parasites were most abundant in the fatty tissue along the ureters and were also present in the liver, lungs, lymph glands, muscles and the mesenteric and subpleural tissues. The pathological changes observed were the formation of cysts and tunnels, thrombi and aneurysms, string-like upheavals of the intima of the veins and arteries, and cirrhosis of the liver. The histological changes in tunnels in the liver and mesenteric tissues were haemorrhages, white cell infiltrations and hyperplasia of the connective tissue. The cysts were surrounded by granulation tissue.

R.T.L.

906—Feldsher i Akusherka. Moscow.

- *a. LUZINA, A. G., 1952.—[Ascariasis and its control.] Year 1952, No. 2, pp. 33–38. [In Russian.]
 *b. VASILKOVA, Z. G., 1952.—[Treatment of trichuriasis.] Year 1952, No. 2, pp. 54–56. [In Russian.]
 *c. VASILKOVA, Z. G., 1952.—[Treatment of enterobiasis.] Year 1952, No. 2, pp. 56–57. [In Russian.]
 *d. VASILKOVA, Z. G., 1952.—[Strongyloides stercoralis.] Year 1952, No. 5, p. 56. [In Russian.]
 *e. VASILKOVA, Z. G., 1952.—[Hepatic parasites in man.] Year 1952, No. 7, pp. 54–55. [In Russian.]
 *f. VASILKOVA, Z. G., 1952.—[Treatment of helminthiasis.] Year 1952, No. 8, pp. 55–57. [In Russian.]

907—Flugblatt. Bundesanstalt für Pflanzenschutz. Vienna.

- a. BÖHM, O., 1952.—“Das Chrysanthemenälchen (*Aphelenchoides ritzemabosi* Schw.).” No. 89, 2 pp.

(907a) Böhm gives a brief, popular account of chrysanthemum eelworm with general recommendations for control including chemical methods. M.T.F.

908—Frontiers. Philadelphia.

- a. BERNSTEIN, J., 1952.—“The lowly leech, bedside companion of the surgeon in the good old days.” 17 (1), 12-13, 32.

909—Glas Srpske Akademije Nauka. Odeljenje Medicinskih Nauka.

- *a. SIMITCH, T. & PETROVITCH, Z., 1952.—[Study of intestinal parasites in man in Yugoslavia. Part I. Intestinal parasites in children from orphanages in Banat.] 205 (5), 231-242. [In Serbian: French summary.]

910—Groenten en Fruit.

- *a. SCHENK, P. J., 1952.—[The root nematode *Heterodera marioni*.] 7, 898. [In Dutch.]
*b. KROFT, W. G. VAN DER, 1952.—[A new method of controlling root nematodes on tomatoes. 2.] 7, 970. [In Dutch.]

911—Indian Journal of Child Health.

- a. JUNGALWALLA, A., 1952.—“Ascariasis in children.” 1 (8), 389-400.

912—Indian Journal of Helminthology.

- a. THAPAR, G. S. & TANDON, R. S., 1952.—“On the life-history of liver-fluke, *Fasciola gigantica* Cobbold, 1855 in India.” 4 (2), 1-36.
b. JAIN, S. L., 1952.—“Monogenea of Indian fresh-water fishes. I. *Haploclleidus gomtius* n.sp. (sub-family: Tetraonchinae) from the gills of *Wallagonia attu* (Bloch), from Lucknow.” 4 (2), 37-42.
c. JAIN, S. L., 1952.—“Monogenea of Indian fresh-water fishes. II. *Thaparocleidus wallagonius* n.g., n.sp., (sub-family: Tetraonchinae) from the gills of *Wallagonia attu* (Bloch), from Lucknow.” 4 (2), 43-48.
d. SANWAL, K. C., 1952.—“On a new avian nematode, *Dispharynx ketupae* n.sp., (sub-family: Acuariinae, Railliet, Henry & Sisoff, 1912) from the brown fish-owl, *Ketupa zeylonensis* (Gmelin).” 4 (2), 49-53.
e. SANWAL, K. C., 1952.—“On a new avian nematode, *Krusadia indica* n.g., n.sp. (sub-fam. Schistorophinae Travassos 1918) from the jungle nightjar (*Caprimulgus indicus*).” 4 (2), 54-60.

(912a) Thapar & Tandon give a detailed and illustrated description of the developmental stages of *Fasciola gigantica* in *Limnaea acuminata*. The miracidium hatches in 7-20 days. Rediae leave the sporocyst on the 9th day and produce daughter rediae by the 12th day. Only daughter rediae produce cercariae. Cercariae emerge 38 days after infection in April and 65 days after infection in February. The complete cycle from egg to adult varies from 2½ to 4½ months. The metacercariae can resist desiccation and can remain alive for a month in water. Only 1.4% to 3.5% of the metacercariae fed experimentally to guinea-pigs and rabbits became infective and the resulting flukes were smaller in size than immature flukes obtained from naturally infected cattle and buffaloes. R.T.L.

(912b) *Haploclleidus gomtius* n.sp., from the gills of the fresh-water fish *Wallagonia attu* near Lucknow, differs from all other species in (i) its larger size (0.90 mm. to 0.96 mm.), (ii) its simple copulatory apparatus, (iii) the presence of additional supporting bars, (iv) the larger size of the dorsal anchor and (v) the presence of a peculiar ventral haptor bar made up of two recurved pieces. R.T.L.

(912c) *Thaparocleidus wallagonius* n.g., n.sp. occurred on the gills of 12 out of 24 *Wallagonia attu* from Lucknow. The presence of three haptor bars distinguishes *Thaparocleidus* from all other genera of the Tetraonchinae except *Murraytrema*. It is distinguished

from *Murraytrema* by posteriorly confluent intestinal crura, the dissimilarity in shape and size of the haptor bars and anchors, the sinistral position of the female genital pore and the position of the ovary which lies behind the testis. G.I.P.

(912d) *Dispharynx ketupae* n.sp., of which one male and three females were collected from the oesophagus of *Ketupa zeylonensis* from Hardoi, is described. The body length is greater than in other species of *Dispharynx*: that of the male is 13.49 mm. and that of the female 18.15 mm. to 18.40 mm. It is further distinguished by the size of the eggs (0.031 mm. \times 0.025 mm.), by possessing a single mid-ventral bell-shaped caudal papilla, by the very narrow caudal alae, by the almost straight anterior cuticular cordons and by the size of the spicules, the left spicule measuring 0.83 mm. and the right 0.225 mm. G.I.P.

(912e) *Krusadia indica* n.g., n.sp. in the intestine of *Caprimulgus indicus* from the Krusadai Islands, superficially resembles *Sciadiocara* Skryabin, 1916 in the disposition of the cuticular head appendages but possesses six membranous cuticular appendages instead of the four winged appendages, two pointed tooth-like papillae on the dorsal and ventral sides of the lipless mouth, and more than double the number of caudal papillae which are equally spread in two longitudinal rows. The eggs are thin-shelled. G.I.P.

913—Japanese Journal of Plant Protection.

- *a. KONDO, T., 1952.—[Root-knot nematode and its control.] 39/40, 352–355. [In Japanese.]

914—Journal of the Albert Einstein Medical Center. Philadelphia.

- a. HEINE, W. I. & ROSENTHAL, A., 1952.—“Trichinosis with cardiac involvement.” 1 (1), 24–28.

915—Journal of the College of Arts and Sciences, Chiba University. Natural Science Series.

- a. YAMAO, Y., 1952.—[Histochemical studies on endoparasites. V. Distributions of the glyceromonophosphatases in the tissues of flukes, *Eurytrema coelomaticum*, *E. pancreaticum*, *Dicrocoelium lanceatum*, and *Clonorchis sinensis*.] 1 (1), 9–13. [In Japanese: English summary p. 13.]

(915a) Yamao has shown that in *Eurytrema coelomaticum* and *E. pancreaticum* alkaline phosphatase is localized in the body wall and the walls of the excretory canals and gives strongly positive reactions, whereas acid phosphatase is demonstrable in most tissues, although giving only weak reactions. In *Dicrocoelium dendriticum* the distribution is similar to that in *Eurytrema* but the acid phosphatase reacts more strongly and is particularly concentrated in the mesenchymatous fibres and their nuclei. The distribution and intensity of acid phosphatase in *Clonorchis sinensis* are very similar to those in *Fasciola hepatica* but Yamao was unable to demonstrate the presence of any alkaline phosphatase in this species. S.W.

916—Journal of Sericultural Science. Tokyo.

- *a. SANO, T., 1952.—[Studies on the silkworm disease caused by mermithid nema. I.] 21, 298–301. [In Japanese.]

917—Karakulevodstvo i Zverovodstvo.

- *a. PETROV, A. M. & PANISHEVA, L. V., 1952.—[Phenothiazine therapy against *Capillaria* infections of the stomach and bladder of mink and sable.] 5 (1), 70–71. [In Russian.]
*b. SOPELCHENKO, M. I., 1952.—[*Dictyocaulus* in sheep under conditions of semi-desert steppes of Uzbekistan.] 5 (4), 69–73. [In Russian.]
*c. DUBNITSKI, A. A., 1952.—[New cestode from the intestines of Barguzin sables.] 5 (4), 79. [In Russian.]
*d. SOPELCHENKO, M. I., 1952.—[Infestation of sheep with cestodes that live as parasites in the adult stage.] 5 (6), 68–69. [In Russian.]

918—Klinicheskaya Meditsina. Moscow.

- a. DESYATOV, M. M., 1952.—[Suppurative hepatic echinococcosis with metastases into the right bile duct.] 30 (8), 88. [In Russian.]
- b. LEIKINA, E. S., GAIKO, B. A., CHELISHEVA, K. M. & BOKSHTEIN, M. E., 1952.—[Early immunodiagnosis of ascariasis in man and its clinical and epidemiological significance.] 30 (11), 49–53. [In Russian.]

(918b) Migration of *Ascaris* larvae frequently produces transitory pulmonary lesions accompanied by general indisposition and eosinophilia in the peripheral blood. That *Ascaris* does cause this is confirmed by the presence of specific antibodies in the blood and, when the parasites become mature, by the appearance of ova in the faeces. Precipitin reactions are a useful means of diagnosis during the initial stages of infection and also for the determination of the date of infection. S.W.

919—Kyushu Agricultural Research.

- a. TANAKA, I., 1952.—[On the effective-bounds of certain fumigants to soil for the root-knot nematode, *Heterodera marioni* (Cornu) Goodey.] No. 10, pp. 147–148. [In Japanese.]
- b. GOTO, S. & HASUKO, E., 1952.—[On the treatment with chloropicrin for the nematic root-rot of sweet potato. 2.] No. 10, pp. 149–150. [In Japanese.]

920—Landwirtschaftsblatt Weser-Ems.

- *a. LÜHRS, 1952.—“Die Bekämpfung der Leberegelseuche.” 99, 579–580.
- *b. LÜHRS, 1952.—“Bekämpfung der Lungenwurmseuche der Kälber.” 99, 657–658.

921—Lantmannen.

- a. ÅKERBERG, E., 1952.—“Stamförsök med rödklöver och lucern. Några erfarenheter från årets stamförsök vid Sveriges Utsädesförenings Ultunafilial.” 36 (30), 589–590.

(921a) In a field experiment stem nematode in red clover reduced the yield by 50%. There are strains with a very good resistance to stem nematode. For central Sweden it is important to obtain resistance and winterhardiness; yield data are given for two new strains, U 036 and U 056, with these characteristics. S.B.

922—Medicina y Cirugía. Bogotá.

- a. ALBORNOZ PLATA, A., 1952.—“Estudio epidemiológico y estadístico del parasitismo intestinal en una zona de Bogotá. Período de tres años: 1947–1948–1949.” 16 (10), 372–389.

(922a) The incidence of intestinal protozoon and helminth parasites in Bogotá decreased from 71·6% in 1947 to 57·8% in 1949, but that of ascariasis rose from 17·48% to 32·21%. Statistical analyses according to age revealed that in spite of the general decrease, incidence of intestinal parasitic diseases increased in the 15–19 years age group from 6·31 per thousand to 10·0 per thousand, and in the 20–24 years group from 6·67 per thousand to 23·85 per thousand, an increase attributed to the immigration of young people to the capital. M.MCK.

923—Medicinski Arhiv. Sarajevo.

- a. PAVIŠIĆ, Z., 1952.—“Operativna terapija intraokularnog cisticercusa.” 6 (1), 23–27. [English summary p. 27.]

924—Medicinski Glasnik. Belgrade.

- *a. KRSTIĆ, B. N., 1952.—“Uklanjanje pantljičare atebrinom.” [Atebrin therapy of helminthiasis.] 6 (2), 47–51.

925—Mémoires de l'Institut Royal Colonial Belge. Section des Sciences Naturelles et Médicales.

- a. SCHWETZ, J., 1952.—“Sur la confusion actuelle dans la classification des planorbes centro-africains et les moyens pour y remédier.” Collection in-8°, 21 (4), 30 pp.
- b. RODHAIN, J., 1952.—“Les adénolymphocèles du Congo belge.” Collection in-8°, 21 (5), 58 pp.

(925b) Rodhain presents a detailed and illustrated account of the lesions of the lymphatic glands caused by filariae in the Belgian Congo, with particular reference to a number of cases of adenolymphocèle. Material was obtained from three districts, one of *Onchocerca volvulus* infection, one of mixed *O. volvulus* and *Wuchereria bancrofti* and one of *W. bancrofti* alone. Three main types of pathological reaction are described. *Dipetalonema streptocerca* infection was not found. Rodhain's observations confirm the view that not all glandular enlargements of the groin are caused by filarial infection and he was unable to find the cause of the localization of the lesions in the groin. S.W.

926—Memoirs of the Faculty of Agriculture, Hokkaido University.

- a. YAMASHITA, J. & TAKAHASHI, S., 1952.—[Epidemiologic survey of parasites of domestic animals in Hokkaido. I. A survey of the suburbs of Sapporo.] 1 (2), 140-144. [In Japanese: English summary p. 144.]

(926a) The infection rates of each helminth species, as revealed by faecal egg counts, in cattle, horses, sheep, pigs and poultry kept in farms in the suburbs of Sapporo are tabulated under each host. R.T.L.

927—Merkblätter über die Hauptsächlichsten Parasiten und Parasitengruppen.

- *a. BORCHERT, A., 1952.—“Die Cestoden unserer Haussäugetiere.” No. 11, 58 pp.
- *b. BORCHERT, A., 1952.—“Endoparasiten des Geflügels.” No. 12, 72 pp.
- *c. BORCHERT, A., 1952.—“Knötchen-, Dickdarm-, Haar- und Peitschenwürmer der Säugetiere.” No. 13, 35 pp.

928—Neurologie a Psychiatrie Československá.

- a. KARPÍŠEK, J. & VALACH, V., 1952.—“*Cysticercus racemosus* měkkých plén mozkových s klinickým obrazem apoplexie.” 15 (5/6), 179-183. [English & Russian summaries pp. 182-183.]

929—Österreichische Zeitschrift für Stomatologie.

- *a. KALMI, I., 1952.—“Die Wurminvasion in der Ätiologie der paradentalen Erkrankungen der Kinder im Pubertätsalter.” 49 (9), 527-528.

930—Okayama Igakkai Zasshi.

- *a. MANNAMI, C., 1952.—[Studies on the resistance of *Ascaris lumbricoides* against repetitive doses of alkylresorcinols.] Supplement, 64, 1271-1288. [In Japanese.]

(930a) *Ascaris lumbricoides* from pig and man were incubated in solutions of hexylresorcinol, cyclohexylchlororesorcinol and octylchlororesorcinol. Others were expelled by santonin after octylchlororesorcinol had been given orally to the host. *Spinicauda japonica* were immersed repeatedly in solutions of various concentrations of these drugs. Female *Ascaris* were exposed to various concentrations *in vitro* and *in vivo* and their eggs were then cultivated and the larvae liberated. In no case was any marked increase of resistance to the drugs observed. Clinical tests were also made. One or two weeks after one-third of the standard dose of cyclohexylchlororesorcinol had been administered, a standard dose was given but the effect of the latter was not inferior to that on non-premedicated controls. Other experiments on patients and on puppies are also reported. The conclusion drawn is that the resistance of *Ascaris lumbricoides* to alkylresorcinols is not increased by repetitive doses. With minute repetitive doses of cyclohexylchlororesorcinol or octylchlororesorcinol there was a cumulative effect which suggests a new rational method of administering these drugs. [Based on an abstract in *Acta Med. Okayama*, 8 (3), p. xxxiii.] R.T.L.

931—Pakistan Journal of Science.

- a. AKHTAR, S. A., 1952.—“A redescription of the species of *Schistorophus longicornis*.” [Correspondence.] 4 (3), 127-128.

(931a) Akhtar found numerous nematodes under the cuticular lining of the gizzard of a *Numenius arquata* at Kabul. The identification of them as *Schistorophus longicornis* was confirmed by Baylis although there were a number of differences from the original description, particularly in the shortness of the head lappets and the shape of the right spicule. The author redescribes and illustrates the species from his specimens. S.W.

932—Pediatrické Listy.

- a. HORÁČKOVÁ, M., HRUBCOVÁ, M., JÍROVEC, O. & POKORNÝ, M., 1952.—“Parasitologické šetření u školní mládeže na Sušicku v r. 1950.” [The investigation of the schoolchildren of Sušice for parasites in the year 1950.] 7 (4), 207-211.

933—Polski Tygodnik Lekarski. Warsaw.

- a. RESZKE, H., 1952.—“Rzadki przypadek wagrzyzcy.” [A rare case of cysticerciasis.] 7 (23), 764-765.
 b. KOCZOROWSKI, S., KONORSKA, R. & KUBICZ, S., 1952.—“Rzadki przypadek bąblowca płuc.” [A rare case of pulmonary echinococcosis.] 7 (37), 1134-1140. [English & Russian summaries pp. 209*, 211*].
 c. KUŹMICKI, R., 1952.—“Próby leczenia atebryną nosicielstwa tasiemca nieuzbrojonego (*Taenia saginata*).” [Attempts at treating the carrier state of *Taenia saginata* with atebrine.] 7 (42), 1333-1336. [English & Russian summaries pp. 249*-251*].

934—Praktický Lékař. Prague.

- *a. HLOUCAL, L. & ZOUBEK, V., 1952.—“Nové případy trichinellosy na Strakonicku.” [New case of trichinellosis in Strakonice.] 32 (5), 106-109.

935—Proceedings of the California Fig Institute.

- *a. MCBETH, C. W., 1952.—“Control of nematodes on figs.” Annual Research Conference (6th), pp. 14-15.

936—Proceedings of the Iowa Academy of Science.

- a. KERR, K. B., 1952.—“Occurrence of *Echinoparyphium recurvatum* (Linstow, 1873) in chickens in Iowa.” 59, 467-468.
 b. PALMER, B. M. F., 1952.—“A comparative study of the incidence of intestinal parasites of children in Des Moines, Iowa.” 59, 487-491.

(936a) In chickens in Iowa an outbreak of catarrhal enteritis with a 5% mortality was associated with numerous *Echinoparyphium recurvatum*. Specimens of *Physa* sp. collected near the brooder house contained a furcocercous cercaria, a stylet cercaria and an ovoid metacercaria. One mature *E. recurvatum* was recovered from a three-week-old chicken three weeks after it had been fed with the metacercaria. R.T.L.

937—Proceedings of the Nebraska Academy of Science.

- *a. JASKOWSKI, B. J. & BONNEMA, J. M., 1952.—“Detergent effects on ascarid development.” [Abstract.] 62, 9.

938—Ptitsevodstvo.

- *a. PETRUSHKIN, A. A. & KSENOFONTOVA, M. I., 1952.—[Phenothiazine—an effective measure in controlling ascariasis in hens.] 7, 30-31. [In Russian.]

939—Publicaciones del Instituto de Biología Aplicada. Barcelona. Serie Zoológica.

- *a. GADEA, E., 1952.—“Contribución al estudio de los nematodos libres terrestres y dulceacuícolas de la fauna española.” 1, 1-213.

940—Quarterly Bulletin of Northwestern University Medical School. Chicago.

- a. PIHL, H., YEAGER, L. B. & HARDING, H. B., 1952.—"Report of a case of multiple parasitosis including *Trichostrongylus* sp. infestation." 26 (4), 321-324.

941—Quarterly Bulletin of the South Pacific Commission.

- *a. KERREST, J., 1952.—"Epidemiological aspects of bancroftian filariosis in New Caledonia." 2 (3).

(941a) [A French version of this paper was published in *Méd. trop.*, 1952, 12, 568-570. For abstract see *Helm. Abs.*, 21, No. 728c.]

942—Report of the Minister for Agriculture. Dublin.

- a. ANON., 1952.—"Annual report, 1951-52." 21st (1951-52), 185 pp.+Appendices [87] pp.

(942a) The Republic of Ireland Potato Root Eelworm Order 1951 came into operation on 1st January, 1952 and 3,006 samples of soil from potato-growing areas were tested for eelworm cysts at the laboratory established for this purpose at the Albert Agricultural College. As *Heterodera schachtii* has not been reported from sugar-beet in Ireland, sugar-beet plants were grown in 146 soil samples from various fields throughout the country in which sugar-beet had been grown for a number of years, but failed to become infected. Other experimental work revealed the occurrence of cruciferous root eelworm. The results of routine examination of faecal samples from domesticated animals are reported by the Veterinary Research Laboratory at Drumcondra and by the Parasitology Section of the Pathological Department of the Veterinary College of Ireland. Immature lungworms and larvae were found post mortem in the bronchioles of a bullock aged one year and nine months which had shown all the symptoms of hoose but no larval lungworms in the faeces.

R.T.L.

943—Report of the Science Service. Division of Botany and Plant Pathology, Canada.

- a. BAKER, A. D., 1952.—"Notes on some nematode problems in 1952." 32nd (1952), pp. 121-124. [Reprint.]

(943a) Baker reviews briefly the occurrence in Canada of various species of plant-parasitic nematodes and indicates their relative importance. One new host record is given, Swiss chard (*Beta cicla* L.) for *Heterodera schachtii*.

J.B.G.

944—Revista Chilena de Higiene y Medicina Preventiva.

- a. NEGHME R., A., SILVA, R. & ARTIGAS, J., 1952.—"Nuevos aspectos sobre epidemiología de la amebiasis y enteroparasitosis." 14 (4), 243-257.

945—Revista Colombiana de Pediatría y Puericultura.

- a. CAMACHO GAMBA, J., 1952.—"La anemia carencial del tropico en el niño. (Necatoriasis - uncinariasis - anemia tropical.)" 12 (2), 90-128.

946—Revista Cubana de Pediatría.

- a. ANIDO, A., VALLEDOR, R., HERNÁNDEZ DE LA BARCA, A., MACHADO ESPARZA, L. F. & MARTÍNEZ CARRERA, N., 1952.—"Parasitismo intestinal. Tratamiento. Ascariidiasis." 24 (11), 653-677.
b. KOURÍ, P., VALDÉS DÍAZ, R. & SOSA BENS, D., 1952.—"Recientes adquisiciones en la clínica y en la terapéutica de la tricocefaliasis infantil." 24 (12), 717-722.
c. LEÓN LEÓN, J. M., 1952.—"Tratamiento de la anquilostomiasis." 24 (12), 723-734.
d. BÉGUEZ CÉSAR, A., CASTELLANOS FONSECA, E. & TEIXIDÓ VAILLANT, S., 1952.—"Teniasis y hymenolepiasis en niños." 24 (12), 735-745.
e. PÉREZ HURTADO, F., 1952.—"Parasitismo por *Strongyloides stercoralis*." 24 (12), 746-758.

(946b) Seventy children with massive infections of *Trichuris* were cured clinically by an enema of 200 c.c. to 700 c.c. containing Santokin (a hexylresorcinol preparation) diluted 1:300 to 1:400 in tepid water.

M.MCK.

(946c) León León gives the details obtained from 5,600 faecal examinations, including 4,000 from city dwellers, undertaken at different times in Cuba. The incidence of *Ascaris*, *Trichuris*, *Necator* and *Enterobius* is tabulated. The author outlines the dosage, effectiveness and side effects of hexylresorcinol, chenopodium oil, carbon tetrachloride and tetrachlorethylene, and stresses the great need for hygienic measures, emphasizing particularly the responsibility which the literate populace should, but do not, take towards the poverty-stricken, neglected rural communities. M.MCK.

(946d) In 4,000 children aged from 6 to 12 years from the Colonia Infantil de Oriente in Cuba the helminth incidence was: *Trichuris* 46.35%, *Ascaris* 24.08%, *Enterobius* 2.28%, *Necator americanus* 2.9%, *Taenia saginata* 0.025%, *Ancylostoma duodenale* 0.225% and *Heterodera radiculicola* 0.025%. Twelve children with *Taenia* infections and three with *Hymenolepis nana* were treated. Atebrin, in single doses of 1 mg. per lb. body-weight given on an empty stomach and followed by a purge, cured five out of six cases of taeniasis (one not traced) and two out of four with *Hymenolepis* (one not traced). Eliminol or Phenendiol, organic iodine compounds, administered with the above routine at the rate of 4 cg. per lb. body-weight cured four out of five cases of taeniasis (one not traced). M.MCK.

(946e) In the region of Norte de Oriente, Cuba, 61.72% of 3,373 faecal examinations were positive for intestinal parasites, with an incidence of 0.43% for *Strongyloides stercoralis*. Gentian violet was administered at the rate of 0.01 gm. per day for two weeks, with an interval of a week before repeating the treatment. In some cases it produced vomiting and abdominal pains. A list is given of the morphological and biological characters by which the rhabditiform larvae of *Necator americanus* and *S. stercoralis* can be distinguished. M.MCK.

947—Revista Española de las Enfermedades del Aparato Digestivo y de la Nutrición.

- a. GARCÍA MORÁN, J., 1952.—"Quistes hidatídicos con expresión clínica de colecistitis." 11 (3), 767-771.

948—Revista do Serviço Especial de Saúde Pública. Rio de Janeiro.

- a. COSTA, O. R. DA, 1952.—"Contribuição ao conhecimento da esquistossomose na Amazônia." 5 (2), 401-409. [English summary p. 404.]

(948a) Costa examined 1,682 people of Amazonas State, Brazil, in seven localities on the river Tapajós near Fordlândia, a focus of schistosomiasis. The results, tabulated according to locality and age group, show that *Schistosoma mansoni* occurred only among immigrants from north-east Brazil. No planorbid vectors were found in the areas. The author recommends eradication of the parasite while the area of infection in Amazonas is still confined to Fordlândia. M.MCK.

949—Revue Médicale de Nancy.

- a. MELNOTTE, P., CANTEGRIT, M. & MICHON, P., 1952.—"Grande éosinophilie sanguine et médullaire chez un colonial. Discussion étiologique. Traitement antifilarien d'épreuve." 77, 603-606.

950—Rivista d'Ostetricia e Ginecologia Pratica.

- *a. SASSI, R., 1952.—"Proglottidi di tenia nell'appendice. Due casi." 34 (7), 332-333.

951—Rivista di Patologia e Clinica. Parma.

- *a. FICAI, A. & RICCI, N., 1952.—"Cisti da echinococco della tiroide. Contributo clinico." 7 (5), 152-159.
*b. LOIZZU, A., 1952.—"Su un caso di ciste idatidea intraepatica simulante un rene mastice." 7 (12), 541-550.

952—Sicilia Sanitaria.

- *a. LATTERI, S., 1952.—"Gli interventi demolitori nell'echinococco del polmone." 5 (5), 205-211.
- *b. SAVINO, L., 1952.—"Contributo clinico sulla cisti di echinococco della tiroide." 5 (6), 297-308.

953—Sovetskaya Meditsina.

- a. MAKHMUDOVA, B. A., 1952.—[Pathogenesis of eosinophilia in the early stages of ascariasis.] Year 1952, No. 8, pp. 23-25. [In Russian.]
- b. KAMALOV, N. G. & TSUTSUNAVA, M. N., 1952.—[A clinical symptom of ancylostomiasis.] Year 1952, No. 10, pp. 27-28. [In Russian.]
- c. OVNATANYAN, K. T., 1952.—[The problem of ascariasis of the heart and blood vessels.] Year 1952, No. 10, pp. 28-31. [In Russian.]
- d. DEMIN, A. A. & SUMAROKOV, A. V., 1952.—[Electrocardiography in echinococcus infection of the heart.] Year 1952, No. 10, pp. 31-35. [In Russian.]

954—Srpski Arhiv za Tselokupno Lekarstvo. Belgrade.

- a. STOJANOVIĆ, V. & ZOGVIĆ, B., 1952.—[Primary bilocular echinococcosis of the anterior mediastinum.] 80 (1), 71-76. [In Serbian: French summary p. 76.]

955—Svenska Läkartidningen.

- a. LUNDBERG, U., 1952.—"En ny form för behandling av oxyuriasis." 49 (45), 2759-2771.

(955a) Lundberg gives a history of the treatment of enterobiasis from the time of Hippocrates to modern times. It has been shown that the females of *Enterobius vermicularis* live from 37 to 101 days. In spite of that, treatment during eight to ten days and repeating the treatment after ten days is the best from a practical point of view. Lundberg has obtained good results by giving gentian violet and lignum quassiae as suppositories. The composition of these is given.

S.B.

956—Terapevticheski Arkhiv.

- a. OVNATANYAN, K. T., 1952.—[Problem of pancreatic ascariasis.] 24 (4), 73-78. [In Russian.]

957—Terre Marocaine.

- *a. RANOUIL, 1952.—"Le téniasis du chien. Ses dangers pour l'homme et les animaux." 26 (274), 327-330.

958—Tidsskrift for den Norske Laegeforening.

- a. KOLSTAD, P., 1952.—"Ascaris og akutt abdomen. To kasus. Diskusjon." 72 (13/14), 431-432. [English summary p. 432.]

959—Tórax. Montevideo.

- a. ARMAND UGÓN, C. V., 1952.—"Tratamiento del quiste hidático del pulmón y de sus complicaciones." 1 (1), 83-104.
- b. LARGHERO, P., 1952.—"Equinococcosis costal." 1 (2), 199-222.
- c. PURRIEL, P., MURAS, O., TOMALINO, D. & MENDOZA, D., 1952.—"Equinococcosis cardiaca. Siembra metastática pulmonar." 1 (2), 223-234.
- d. RAVERA, J. J., 1952.—"Equinococcosis heterotópica pleural con neumotórax espontáneo. Hidátide vagabunda pleural con neumotórax espontáneo hidática (forma seca, sin derrame)." 1 (3), 348-353.

960—Transactions of the American Neurological Association.

- a. CABIESES, F. & RAVENS, J. R., 1952.—"Cysticercosis of the central nervous system." 77th Annual Meeting (1952), pp. 76-79.
- b. ARANA INIGUEZ, R., RODRÍGUEZ BARRIOS, R. & SAN JULIÁN, J., 1952.—"Surgical treatment of hydatid cysts of the brain." 77th Annual Meeting (1952), pp. 210-211.
- c. TRELLES, J. O. & ROCCA, E. D., 1952.—"Thirty-five verified cases of cysticercosis of the brain." 77th Annual Meeting (1952), pp. 263-267.

961—Trudi Gel'mintologicheskoi Laboratorii. Akademii Nauk SSSR.

- a. SKRYABIN, K. I., 1952.—[Problems of helminthological science in connection with Stalin's plans to reorganize nature in the USSR.] 6, 27-35. [In Russian.]
- b. PODYAPOLSKAYA, V. P., 1952.—[The inculcation of Pavlov's teachings in the development of helminthology.] 6, 36-51. [In Russian.]
- c. SHIKHOBALOVA, N. P. & PRASOLOVA, M. A., 1952.—[Experimental investigation of immunity against *Trichinella*. I. The development of *Trichinella* in heavy and light infections in experimental animals.] 6, 52-59. [In Russian.]
- d. SHIKHOBALOVA, N. P., 1952.—[Experimental investigation of immunity against *Trichinella*. II. Immunity acquired as a result of the disease.] 6, 60-71. [In Russian.]
- e. SPASSKI, A. A., 1952.—[An investigation of the life-histories of anisakids (Ascaridata: Anisakidae).] 6, 72-73. [In Russian.]
- f. SPASSKI, A. A., 1952.—[On the nomenclature of the genus *Diorchis* (Cestoda: Hymenolepididae).] 6, 74-75. [In Russian.]
- g. SPASSKI, A. A., 1952.—[On the systematic position of the Hymenolepididae with a double row of hooks on the scolex.] 6, 76-78. [In Russian.]

(961c) The growth of *Trichinella spiralis* in the intestine is not the same in different hosts. In the guinea-pig, the adult is generally larger than in the rat, mouse, rabbit, dog etc. Tabulations of investigations on white mice show (i) the dependence of the percentage of trichinae developing in the intestine on the number of larvae in the infecting dose, (ii) the proportion of larvae in the infective dose to those reaching the muscles, (iii) the ratio of males to females at various periods of infection and (iv) the sizes of the trichinae in the intestine in slight and intense infections.

R.T.L.

G.I.P.

(961d) When mice are superinfected with *Trichinella spiralis* on the 12th, 30th and 60th days after a primary infection, the worms in the intestine are fewer in numbers, smaller in size and leave the host sooner, but no marked shortening of the life of the adults was observed in immunized mice. The number of *Trichinella* larvae which encyst in the muscles of immunized mice after superinfection is much smaller than in controls and is correlated with the smaller number of worms developing in the intestine. A slight infection with as few as 50 larvae can produce immunity. The immunity resulting from superinfections after 12 or 30 days is more intense than from superinfection on the 60th day.

R.T.L.

G.I.P.

(961e) The discovery of anisakid larvae in the subcutaneous tissues of shrews, fish etc. indicates that although some species of *Porrocaecum* may be acquired by birds from invertebrates, others are acquired from vertebrates. Spasski questions whether these infected shrews should be considered primary intermediate hosts or adventitious reservoir hosts. As he has found over 100 larvae in shrews and other instances have been reported from North America, he is of the opinion that these subcutaneous larvae are not pseudoparasites.

R.T.L.

G.I.P.

(961f) The genus *Diorchis* Clerc, 1903 is now subdivided into two subgenera: (i) *Diorchis* Clerc, 1903 (syn. *Nudiorchis* Matevosyan, 1941) with type species *D. (D.) acuminata* (Clerc, 1902) (syn. *Drepandotaenia acuminata* Clerc, 1902 and *Diorchis (Nudiorchis) acuminata* (Clerc, 1902) Matevosyan, 1941) and (ii) *Acanthodiorchis* n. subg. (syn. *Diorchis* Matevosyan, 1941) with type species *Diorchis (Acanthodiorchis) skrjabini* Udintsev, 1937.

R.T.L.

G.I.P.

(961g) Among the avian cestodes, there is a small group with three testes in each segment, with unilateral genital pores and with two rows of hooks on the scolex. They approach the family Hymenolepididae but there are also about 300 species of Hymenolepididae with three testes in each segment and only one row of hooks on the scolex, which in this respect approach the Dilepididae. The combination of the most important characters of these two groups in a number of species listed has introduced discord in the determination of their systematic position. *Meggittia* is transferred to the Dilepidinae.

R.T.L.

G.I.P.

961—Trudi Gel'mintologicheskoi Laboratorii. Akademii Nauk SSSR. (cont.)

- h. SPASSKI, A. A. & ROMANOVA, N. P., 1952.—[On the morphology of *Soboliphyme* (Dioctophymata: Soboliphymidae).] 6, 79–84. [In Russian.]
- i. SPASSKI, A. A., RIZHIKOV, K. M. & SUDARIKOV, V. E., 1952.—[The helminth fauna of wild mammals in the region of Lake Baikal.] 6, 85–113. [In Russian.]
- j. MOZGOVOI, A. A., 1952.—[The biology of *Porrocaecum crassum*, nematodes of wild aquatic birds.] 6, 114–125. [In Russian.]
- k. MOZGOVOI, A. A., 1952.—[The biology of ascarids.] 6, 126–130. [In Russian.]

(961h) *Soboliphyme baturini* Petrov, 1930, common in cats, dogs, foxes etc., is now recorded for the first time from *Martes (Lamprogale) flavigula*. *S. soricis*, reported once from Scotland, has been found in *Sorex araneus*. Spasski & Romanova consider that the sucker-like mouth capsule is an important taxonomic feature of *Soboliphyme* and they therefore propose the retention of Petrov's Soboliphymidae, suppressed by Baylis & King, in an emended form. A third species, *S. hirudiniformis*, was described by Kirschenblatt in 1946 from *Talpa coeca orientalis*.
R.T.L.
G.I.P.

(961i) Brief systematic notes are given of the helminths found in 21 species of wild mammals from around Lake Baikal. The parasites are also listed under their respective hosts. An illustrated account is given of a number of the species and of *Syphacia* sp. from *Sciurus vulgaris* and of *Rictularia baicalensis* n.sp. from *Mus musculus* and *Apodemus agrarius*. This new species resembles *R. coloradensis* in that the mouth capsule opens terminally and they both have the same number of combs in a row, but in *R. baicalensis* the spicules are equal and the egg measures 0.037–0.042 mm. × 0.029–0.033 mm. whereas in *R. coloradensis* the spicules are unequal and the egg measures 0.033 mm. × 0.022 mm. Both differ from *R. harrisi* in which the mouth capsule opens dorsally.
R.T.L.
G.I.P.

(961j) The eggs of *Porrocaecum crassum*, a parasite of aquatic birds and particularly of ducks, develop to the infective stage in 5 to 12 days in water. In southern Russia, the infective eggs are taken up by *Haematopota* larvae. The nematode larvae then hatch, migrate into the blood sinuses and after about 24 hours accumulate in the posterior third of the body. When the infected insect larvae are eaten by ducks or other aquatic birds the nematode larvae first invade the stomach mucosa but afterwards attain sexual maturity in the small intestine.
R.T.L.
G.I.P.

(961k) Four types of development are recognized in the Ascaridata, viz., (i) Ascaridioid, typified by *Ascaridia galli* in which the larvae do not migrate via the blood system of the host, (ii) Ascarioid, typified by *Ascaris* in which the larvae have a hepato-pulmonary migration, (iii) Toxocaroid, typified by *Toxocara* and *Neoascaris*, in which the larvae migrate from the pregnant animal into the foetus via the placenta and become adult shortly after its birth, and (iv) Anisakoid, typified by *Contracaecum* and *Pseudanisakis* in which larval development occurs in an intermediate host which is either planktonic or is a predatory fish. As Mozgovoi has recently shown, *Porrocaecum crassum* also requires an intermediate host. He recalls that Skryabin has divided the Ascaridata into two groups, viz., geohelminthic (Ascaridioid and Ascarioid types) and biohelminthic (Anisakoid types). The Toxocaroid type occupies an intermediate position between Ascaridioid and Ascarioid types on the one hand and Ascaridioid and Anisakoid types on the other.
R.T.L.
G.I.P.

961—Trudi Gel'mintologicheskoi Laboratorii. Akademii Nauk SSSR. (cont.)

- l. RIZHIKOV, K. M., 1952.—[New data on the Syngamidae.] 6, 131-138. [In Russian.]
- m. RIZHIKOV, K. M., 1952.—[Reservoirs of *Physocephalus sexalatus* (Molin, 1860)—nematodes of pigs.] 6, 139-141. [In Russian.]
- n. RIZHIKOV, K. M., CHERTKOVA, A. N. & VEITSMAN, L. N., 1952.—[On the helminth fauna of domestic guinea-fowl.] 6, 142-151. [In Russian.]
- o. SUDARIKOV, V. E. & RIZHIKOV, K. M., 1952.—[Description of a new family of nematodes from fresh-water fish (Spirurata: Haplonematidae n.fam.).] 6, 152-157. [In Russian.]
- p. SUDARIKOV, V. E., 1952.—[Some results of the study of the helminth fauna of vertebrates in Gorkovskoye district (from material collected on the 63rd and 79th Soviet Helminthological Expeditions).] 6, 158-174. [In Russian.]
- q. GUSHANSKAYA, L. K., 1952.—[The helminth fauna of wild birds of the SSSR.] 6, 175-222. [In Russian.]

(961l) Rizhikov describes and figures *Syngamus* (*Ornithogamus*) *arcticus* n.sp. from *Gavia stellata*. The ovum, unlike that of other species of *Syngamus*, has no operculum. The spicules are only 0.051 mm. long whereas in the other species of the subgenus *Ornithogamus* they are twice this length. Although *Syngamus parvus* has similarly short spicules, its other characteristics have placed it in the subgenus *Syngamus*. *Syngamus auris* Faust & Tang, 1934 is transferred to *Mammomonogamus*, and *Syngamus hexadontus* Chin, 1950 is placed in the subgenus *Ornithogamus*.

R.T.L.
G.I.P.

(961m) It has already been shown that various mammals and birds can be infected, naturally and experimentally, with the infective larvae of *Physocephalus sexalatus*. It appears that all classes of vertebrates can act as hosts for the infective stage, for Rizhikov has now succeeded in infecting experimentally fish (*Carassius carassius* and *Misgurnus fossilis*), amphibians (*Rana temporaria* and *Bombina bombina*) and reptiles (*Testudo horsfieldii*).

R.T.L.
G.I.P.

(961n) Guinea-fowl obtained from the zoological gardens in Moscow and from farms in the surrounding country harboured *Heterakis gallinae*, *Capillaria columbae*, *C. caudinflata*, *Thominx collaris* and *Hymenolepis* sp. *C. columbae* and *Hymenolepis* sp. are new records for this host. As guinea-fowl were also infected experimentally with *Syngamus skrjabinomorpha* helminth parasites of the guinea-fowl now number 50 species.

R.T.L.
G.I.P.

(961o) Haplonematidae, a new family of Thelazioidea, is created for the genera *Haplonema*, *Ichtyobronema* and *Cottocomephoronema*. *Ichtyobronema conoura* (Linstow, 1885) Gnedina & Savina, 1930 is renamed *I. gnedini* nom.nov. and *Haplonema hamulatum* Moulton, 1931 becomes *Cottocomephoronema hamulatum* (Moulton, 1931) n.comb.

R.T.L.
G.I.P.

(961p) During the 79th Soviet Helminthological Expedition in the Gorkovskoye district 1,324 vertebrates were examined in addition to 1,194 domestic animals in slaughterhouses: 217 helminth species were collected. The numbers of trematodes, cestodes, nematodes and acanthocephalans found are tabulated under the various vertebrate classes. They are also considered from the point of view of their dependence on (i) the type of food of the host, (ii) the host locality, (iii) the age of the host, (iv) seasonal changes and (v) the physiological condition of their hosts.

R.T.L.
G.I.P.

(961q) Gushanskaya annotates 101 species of helminths of wild birds in Russia. She also classifies them under their hosts. One new species is described and figured, viz., *Corrigia viktori* n.sp. in *Coturnix coturnix*. It differs from *Corrigia corrigia* in having oral and ventral suckers of equal size and an ovary larger than the testes. In the latter feature it also differs from *C. skrjabini*. The ovary is round whereas in *C. plesiosomum* it is lobed.

R.T.L.
G.I.P.

961—Trudi Gel'mintologicheskoi Laboratorii. Akademii Nauk SSSR. (cont.)

- r. GUSHANSKAYA, L. K., 1952.—[A new subfamily Gynaecotylinae n.subf. of the family Microphallidae (Trematoda).] **6**, 223–224. [In Russian.]
- s. GUSHANSKAYA, L. K. & KROTOV, A. I., 1952.—[The discovery of the male of *Schistorophus skrjabini* (Nematoda: Schistorophidae).] **6**, 225–228. [In Russian.]
- t. KASIMOV, G. B., 1952.—[A new nematode from a Trans-Caucasian partridge.] **6**, 229–231. [In Russian.]
- u. KASIMOV, G. B., 1952.—[*Skrjabinus popovi* n.sp., a new trematode from *Tetraogallus caucasicus*.] **6**, 232–234. [In Russian.]
- v. DELYAMURE, S. L., 1952.—[Zoogeographical characteristics of the helminth fauna of pinnipeds and cetaceans.] **6**, 235–250. [In Russian.]

(961r) Gynaecotylinae, a new subfamily of Microphallidae, is created to contain *Gynaecotyla* Yamaguti, 1939 as type and *Diacerabulum* Belopolskaya, 1952, and is characterized particularly by the presence of two ventral suckers.

R.T.L.

G.I.P.

(961s) The male of *Schistorophus skrjabini* (Vasilkova, 1926) Gushanskaya, 1950 is now described and figured for the first time. It is 8.27 mm. to 8.46 mm. in length. The tail carries cuticular alae. There are 22 pairs of pre-anal and six pairs of post-anal papillae. All the papillae are pedunculate except for two post-anal pairs which are sessile. The spicules are unequal: the right is 0.572 mm. long, is narrower than the left and has a triangular projection near its distal end; the left spicule is 0.087 mm., of peculiar shape and acts as a gubernaculum. Its proximal end is 0.042 mm. wide and the distal end is 0.021 mm. wide.

R.T.L.

G.I.P.

(961t) The male of *Lemdana skrjabini* n.sp., a filariid worm from *Francolinus orientalis caucasica*, is 27.5 mm. to 29.1 mm. and the female 42.9 mm. to 54.2 mm. in length. The cuticle is striated. The head carries one pair of small lateral and two pairs of submedian papillae. The oesophagus is divided into two sections; in the male the length of the anterior is 0.379 mm. and the posterior 0.951 mm.; in the female the anterior is 0.33 mm. to 0.465 mm. and the posterior 1.127 mm. The excretory pore is 0.165 mm. from the anterior end in the male. The spicules are yellowish in colour, unequal in size and shape and ventrally curved. The larger spicule is 0.297 mm. long and is pointed; the smaller spicule is 0.165 mm. and is blunt. There is no gubernaculum. The male tail has two indistinct papillae. In the female the genital opening is 3.48 mm. to 3.72 mm. from the head end and the tail carries a single papilla at its tip.

R.T.L.

G.I.P.

(961u) In *Skrjabinus popovi* n.sp. from *Tetraogallus caucasicus* the vitellaria and the testes lie behind the ventral sucker, whereas in *S. latus* the vitellaria reach the anterior edge of the ventral sucker and the right testis is on a level with its centre. The vitelline follicles are large; in *S. biliosus* they are scarcely visible. The ovary lies behind the right testis; in *S. lanceatus* it is somewhat to the left of the middle line and the vitellaria reach only to the centre of the ventral sucker. In *S. similis* the testes lie at the sides of the ventral sucker and in *S. rarus* they are level with its anterior edge. In *S. skrjabini* the ventral sucker lies between the testes and these are smaller than the ovary, whereas in *S. popovi* the testes and ovary are about equal in size.

R.T.L.

G.I.P.

(961v) Delyamure has investigated the adult and larval helminths of pinnipeds and of cetaceans living in five zoo-geographical regions of the Pacific Ocean, sets out in tabular form the distribution of the 157 species known to be parasitic in these two groups and discusses the underlying general principles.

R.T.L.

G.I.P.

961—Trudi Gel'mintologicheskoi Laboratorii. Akademii Nauk SSSR. (cont.)

- w. DELYAMURE, S. L., 1952.—[Dependence of the helminth fauna of dolphins of the Black Sea and Sea of Azov on oecological and geographical factors.] 6, 251–258. [In Russian.]
- x. KROTOV, A. I., 1952.—[New cestodes (Hymenolepididae and Paruterinidae) from birds.] 6, 259–272. [In Russian.]
- y. KROTOV, A. I., 1952.—[Nematodes of birds from the lower districts of the Amu estuary.] 6, 273–277. [In Russian.]
- z. KROTOV, A. I. & DELYAMURE, S. L., 1952.—[On the helminth fauna of mammals and birds of the SSSR.] 6, 278–292. [In Russian.]
- ba. SOBOLEV, A. A., 1952.—[*Skrjabinoclava longifuniculata* n.sp., a new nematode from birds.] 6, 293–295. [In Russian.]

(961w) Following on his inquiry into the influence of zoo-geographical factors on the distribution of the helminth fauna of marine mammals in the Pacific Ocean (see No. 961v above), Delyamure has made an analysis of the helminths of dolphins, comparing those found in dolphins of the Black Sea with those found in the same host from the Mediterranean and the Atlantic Ocean. He then uses helminthological data in a discussion of the taxonomic status of dolphins in the Black Sea and Sea of Azov (on which mammalogists disagree) and maintains that these data support the views of Tsalkin, Kleinenberg and Kirpichnikov on the taxonomy of the Black Sea *Phocaena*.
R.T.L.
G.I.P.

(961x) Of the 37 cestode species recorded by Krotov from birds, three are new. In *Dicranotaenia guschanskoi* n.sp. from *Calidris minuta* the ovary is compact and the proboscis has ten hooks which measure 0.089–0.092 mm. A table sets out the different hook sizes by which eight other species of Hymenolepidae can be distinguished. In *D. skrjabinissima* n.sp. from *C. subminuta* the proboscis has 68 to 70 hooks, differing from *D. polyacantha* which has only 60 to 62 hooks and strong circular musculature in the proboscis sheath. In *Aploparaksis sachalinensis* n.sp. from *Capella solitaria japonica* the cirrus is bulbous and armed; it is thus differentiated from other species of *Aploparaksis*.
R.T.L.
G.I.P.

(961y) Krotov lists and gives brief notes on 14 known and seven unidentified species of nematodes collected from 16 avian host species from the lower Amu estuary region.
R.T.L.
G.I.P.

(961z) Of 36 helminth species from 27 avian and mammalian hosts two were trematodes, 19 were cestodes, ten were nematodes and five were acanthocephalans. Two new forms are described. In the Campulinae *Leucasiella mironovi* n.g., n.sp. is described from *Delphinapterus leucas*. *Leucasiella*, which has triangular eggs, differs from *Synthesium*, *Orthosplanchnus*, *Oschmarinella* and *Odhneriella* for the cirrus is unarmed as in *Lecithodesmus*, *Zalophotrema* and *Campula*. But in *Lecithodesmus* the ovary is lobed and the vitelline follicles form oblong groups, in *Zalophotrema* the ovary is lobose and the eggs are not triangular in shape, while in *Campula* the gut has lateral branches and the vitellaria reach the pharynx whereas in *Leucasiella* they are weakly developed and do not extend forward beyond the middle of the anterior testis. *Bolbosoma bobrovoi* n.sp. from *Callorhinus ursinus curilensis* is similar to *B. turbinella* and *B. nipponicum* but there are only 14 to 16 longitudinal rows with four to five hooks in each row, the last hook of which is much smaller than the others.
R.T.L.
G.I.P.

(961ba) In *Skrjabinoclava longifuniculata* n.sp. from *Charadrius* sp. the male measures 2.4 mm. and the female 3.468 mm. It differs from *S. solonitzini* and other species of the genus by the greater prolongation of the cordons on the anterior end of the body. Their length is 160 μ in the male and 180 μ in the female whereas in *S. solonitzini* they respectively measure 46 μ –63 μ and 58 μ . Two rows of spines run down the body from below the cordons. The spicules are 0.248 mm. and 0.122 mm. long.
R.T.L.
G.I.P.

961—Trudi Gel'mintologicheskoi Laboratorii. Akademii Nauk SSSR. (cont.)

- bb. SOBOLEV, A. A., 1952.—[Phylogenetic relationships and systematics of the Camallanata.] **6**, 296–301. [In Russian.]
- bc. FEDYUSHIN, A. V., 1952.—[*Ascaridia skrjabini* n.sp., a new nematode from *Tetraogallus himalayensis* in Tian-Shan.] **6**, 302–304. [In Russian.]
- bd. SCHULZ, R. S. & DAVTYAN, E. A., 1952.—[Latent helminthiases and their epizootic importance.] **6**, 305–314. [In Russian.]
- be. MACHULSKI, S. N., 1952.—[Two new genera and species of *Spirurata* from mammals.] **6**, 315–322. [In Russian.]

(961bb) Sobolev agrees with Chitwood & Wehr in bringing Camallanidae and Cucullanidae together into the Camallanoidea Travassos, 1920 and associating this superfamily with Dracunculoidea Cameron, 1934 in Chitwood's Camallanata. Cucullanidae Cobbold, 1864 contains Seuratinae Hall, 1916 and Cucullaninae Yorke & Maplestone, 1926 which is now subdivided into two new tribes named Cucullaninae and Dichelininae [but not defined]. In Dracunculoidea there are now four families, viz., Dracunculidae Leiper, 1912 (Dracunculinae, Avioserpensinae, Philometrinae and Micropleurinae), Tetanonematidae Skryabin & Shikhobalova, 1948, Cystopsidae Skryabin, 1923 and Anguillicolidae Yamaguti, 1935. R.T.L. G.I.P.

(961bc) *Ascaridia skrjabini* n.sp. from *Tetraogallus himalayensis* differs from *A. galli*, *A. compar*, *A. compressa*, *A. granulosa* and *A. styphlocerca* by the smaller body (male 23 mm.–39 mm., female 35 mm.–60 mm.) and the shorter tail. There are ten genital papillae of which five are pre-anal. The distal end of the slightly unequal spicules is very characteristically swollen, like a pinhead. R.T.L. G.I.P.

(961bd) Schulz & Davtyan discuss the problem of latent helminthiasis in which helminths at various stages of growth remain inactive in the host. From experimental data they conclude that the latent state may extend over 1½ years during which the larvae remain in the host without undergoing further development. Factors on which the occurrence of this latent stage depends are unfavourable conditions in the hosts, e.g. primary or secondary immunity, specific physiological states and the effect of the external environment. Factors which influence the return of activity are the loss or lowering of the host's immunity and unfavourable feeding and living conditions. The nature of latent helminthiasis explains the impracticability of revealing these infections by examination for ova or larvae. The diagnosis of latent helminthiasis will depend on the utilization of definite immunological reactions and special investigations should be made into the immuno-diagnosis of helminthiases at the different stages of their development, the duration of positive reactions, the degree of specificity of the reactions etc. The recognition of latent helminthiasis may assist in elucidating some mysterious outbreaks of helminthiases and lead to the discovery of new epizootic and epidemiological principles. R.T.L. G.I.P.

(961be) Two new genera, *Petrowospirura* and *Skrjabinocercina* are added to the Spirocercinae. *Petrowospirura lynxi* n.g., n.sp. from *Lynx lynx* and *Otocolabus manul* has the following characters: there are no lateral alae along the sides of the body, the mouth has six well developed bilobed lips, the chitinized mouth capsule is funnel-shaped and contains six teeth which do not extend beyond its anterior margin (of these five are very small and one is thin and broad); in the female the tail has no terminal papillae and the genital opening is in the anterior third of the body; in the male the gubernaculum is well formed and the spicules are very unequal. In *Skrjabinocercina petrowi* n.g., n.sp. from *Alactaga saltator mongolica* there are no lateral alae on the body, the mouth has four well developed lips each separated by a papilla, the funnel-shaped chitinized mouth capsule contains six teeth (of which the two laterals are larger than the subdorsal and subventral), the teeth are supported by ridges arising from the base of the capsule and they do not extend beyond the anterior margin of the mouth; in the male the genital papillae are pedunculated; in the female the genital opening is immediately in front of the anus and the tail has no terminal papillae. R.T.L. G.I.P.

961—Trudi Gel'mintologicheskoi Laboratorii. Akademii Nauk SSSR. (cont.)

- bf. ROMANOV, I. V., 1952.—[New species of helminths from *Martes zibellina*.] 6, 323-330. [In Russian.]
- bg. RUKHLYADEV, D. P., 1952.—[On the helminth fauna of the wild boar.] 6, 331-333. [In Russian.]
- bh. NALETOV, N. A., 1952.—[Pathological and morphological changes in the lungs of sheep caused by *Cystocaulus* infection.] 6, 334-337. [In Russian.]
- bi. PARAMONOV, A. A., 1952.—[On the oecological classification of plant-parasitic nematodes.] 6, 338-369. [In Russian.]

(961bf) *Taenia skrjabini* n.sp. from *Martes zibellina* is closely related to *T. intermedia* Rudolphi, 1809 but has the following characteristics: the strobila is only 8-10 cm. long; the suckers are 0.138-0.168 mm. in diameter; the scolex is 0.634-0.840 mm. in diameter; there are hooks on the scolex, those of the first row measure 0.153-0.155 mm. and those of the second row 0.126-0.129 mm.; the cirrus pouch is 0.160-0.170 mm. in length and 0.060-0.168 mm. in breadth; the uterus has 14-15 lateral branches and the eggs are 0.027 mm. \times 0.023 mm. *Sobolevingylus petrovi* n.g., n.sp. is described and figured from *Martes zibellina* and a new subfamily of Pseudaliidae is made, the Sobolevingylinae. The new genus has a weakly developed bursa, pre- and post-anal papillae and a dorsal lobe but lacks a gubernaculum. The dorsal ray has four terminals. The spicules are short and broaden at their proximal ends. The genital opening is in front of the anus, near the posterior end.

R.T.L.

G.I.P.

(961bg) Rukhlyadev reports the occurrence of the following species from a wild boar in the Caucasian Reserve: *Metastrongylus salmi*, *M. pudendotectus*, *M. elongatus*, *Physocephalus sexalatus* and *Rhabditata* gen. et sp. inq.

R.T.L.

G.I.P.

(961bh) In cystocauliasis in sheep Naletov recognizes two types, viz., uncomplicated cystocauliasis pneumonia and cystocauliasis pneumonia with bacterial complications. He describes the consequent pathological changes in the lungs.

R.T.L.

G.I.P.

(961bi) Phytonematodes are defined as those which are parasitic in plants or have temporarily settled in their tissues. The Tylenchata are all considered to be parasitic and are divided into (i) pathogenic non-specific ecto- or endo-parasitic phytohelminths and (ii) pathogenic specific phytonematodes, monomorphic and dimorphic. The phytohelminths differ sharply from the phytonematodes in that both *in vivo* and when fixed they do not stain in cold solutions of methylene blue. The oecological characteristics of each group are compared with their taxonomic characteristics and a rearrangement of the species of *Diplogaster* is suggested. A new suborder, *Diplogasterata*, containing a number of new families and genera is proposed whereby the correlation of the oecology and taxonomy underlies their role in the phylogenetic development of natural systematic groups. The order *Rhabditida* is subdivided into *Rhabditata* Chitwood, 1933 ex parte, *Tylenchata* (Thorne, 1949) Chitwood, 1950 and *Diplogasterata* n.subordo. *Diplogasterata* contains (i) *Diplogasteridae* Steiner, 1919, (ii) *Diplogasteroididae* n.fam. (= *Diplogasteroidinae* Filipjev & Schuurmans Stekhoven, 1941), (iii) *Odontopharingidae* Micoletzky, 1922, (iv) *Demaniellidae* n.fam. (= *Demaniellinae* Paramonov, 1951), (v) *Cylindrocorporidae* Goodey, 1939 and (vi) *Tylopharingidae* n.fam. (= *Tylopharinginae* Filipjev & Schuurmans Stekhoven, 1941). *Diplogasteridae* is subdivided into *Diplogasterinae* Micoletzky, 1922 ex parte and *Neodiplogasterinae* n.subf. with *Neodiplogaster tropica* Cobb, 1924 as type. *Diplogasterinae* contains fourteen genera, viz., *Diplogaster* Schultze, 1857, type *D. micans*; *Pristionchus* Kreis, 1932, type *P. lheritieri* (Maupas, 1919) n.comb.; *Butlerius* Goodey, 1929, type *B. butlerius*; *Fuchsia* Micoletzky, 1922, type *F. butschlii* (Fuchs, 1915) and ten new genera: *Diplogasteritus* n.g., type *D. nudicapitatus* (Steiner, 1914) n.comb.; *Diplogastrellus* n.g., type *D. gracilis* (Bütschli, 1876) n.comb.; *Oigolaimella* n.g., type *O. winchesi* (Goodey, 1929) n.comb.; *Paraigolaimella* n.g., type *P. coprophaga* (de Man,

961—Trudi Gel'mintologicheskoi Laboratorii. Akademii Nauk SSSR. (cont.)

- bj. SKARBILOVICH, T. S., 1952.—[A study of the species of the genus *Hexatylus* Goodey, 1926.] 6, 370-375. [In Russian.]
 bk. POLOZHENTSEV, P. A., 1952.—[New Mermithidae from the sandy soil of pine woods.] 6, 376-382. [In Russian.]
 bl. VELICHKIN, P. A., 1952.—[*Alfortia* causing disease in horses maintained in droves.] [Abstract of thesis.] 6, 383-392. [In Russian.]
 bm. LEVASHOV, M. M., 1952.—[The status of the helminth fauna of the SSSR and a study of the characteristics of helminths in oecological and geographical zones.] [Abstract of thesis.] 6, 392-396. [In Russian.]
 bn. MOROZOV, F. N., 1952.—[Heterophyidae of man, domestic and wild animals.] [Abstract of thesis.] 6, 397-400. [In Russian.]

1876) n.comb.; *Fictor* n.g., type *F. vorax* (Goodey, 1929) n.comb.; *Paradiplogaster* n.g., type *P. similis* (Bütschli, 1876) n.comb.; *Eudiplogaster* n.g., type *E. striatus* (Bütschli, 1876) n.comb.; *Pareudiplogaster* n.g., type *P. striatulus* (Fuchs, 1933) n.comb.; *Anchidiplogaster* n.g., type *A. dubius* (Hnatewytch, 1929) n.comb.; *Diplogasterium* n.g., type *D. micoletzkyi* (Hnatewytch, 1929) n.comb. The formation of these new genera has necessitated the creation of numerous new combinations for species transferred from the original genus *Diplogaster*. *Paroigolaimella anchicopropha* is proposed for *D. coprophagus* of Goodey, 1929. R.T.L.
G.I.P.

(961bj) *Hexatylus vigissi* n.sp. is found on the roots, stems and tubers of potatoes and on the weeds *Atriplex hortensis*, *Galium* sp., *Sonchus arvensis*, *Plantago major*, *Polygonum tataricum*, *Centaurea* sp., *Equisetum pratense*, *Cuscuta*, *Barbarea*, *Geranium*, *Matricaria*, *Malva* and *Poa*. It differs from *H. viviparus* in having a smooth cuticle and three basal swellings on the stylet. The anterior portion of the oesophagus is cylindrical. The tail is conical and pointed whereas that of *H. coprophagus* is thread-like. Hexatylinae n.subf. contains *Hexatylus* and *Deladenus*. R.T.L.
G.I.P.

(961bk) Polozhentsev describes three new Mermithinae living in sandy soil of pine woods. The new species are morphologically similar to those of the aquatic genus *Bathymermis* but, as a follower of the teaching of Michurin and Lysenko, he finds it impossible to unite terrestrial and aquatic species in a single genus and accordingly creates for these new terrestrial species a new genus named *Skrijabinomermis*. In *S. tolski* n.g., n.sp. the male is 40.3-43.5 mm. long, the arched spicules are 0.925-1.062 mm. in length, the amphids are 0.013-0.024 mm. \times 0.005-0.007 mm. and the excretory pore opens at the level of the posterior end of the oesophagus. In *S. sukatschevi* n.sp. the male is 47.5-53.4 mm. long, the coiled spicules measure 1.860 mm., the amphids are 0.015 mm. \times 0.005 mm. and the excretory pore opens near the beginning of the intestine. *Psammomermis busuluk* n.sp. occurs in soil pits and is the smallest species of the genus. The male measures 11-13 mm., the female 32-58 mm.; the cuticle is smooth, the spicules are 0.567 mm. long and are twice the length of those of *P. korsakowi*; the vagina is somewhat curved. The tails in both sexes are longer than in other species. R.T.L.
G.I.P.

(961bl) This thesis concerns the diagnosis of *Alfortia* disease in horses, the clinical symptoms, pathology and histology of intestinal and peritoneal infections and the influence of *Alfortia* on the course of salmonellosis (*Salmonella abortus equi*) in young horses under experimental and natural conditions. R.T.L.
G.I.P.

(961bn) Morozov's thesis reviews the morphology and geographical distribution of the 116 known species of Heterophyidae. In a new classification of this superfamily, Euryhelminae n.subf. [this also appeared in a paper by the same author in 1950, for abstract see Helm. Abs., 19, No. 308f] for *Euryhelminis* Poche, 1925 is added to the five subfamilies of Heterophyidae, and Haplorchoidinae n.subf. to the three subfamilies of Cryptogonimidae Ciurea, 1933.

961—Trudi Gel'mintologicheskoi Laboratorii. Akademii Nauk SSSR. (cont.)

- bo. BUTORIN, F. S., 1952.—[Dynamics of the principal helminthiases and an analysis of measures for their control in farm animals in the Yaroslavl region.] [Abstract of thesis.] 6, 400-403. [In Russian.]
- bp. GAGARIN, V. G., 1952.—[Capillariasis of domestic birds.] [Abstract of thesis.] 6, 403-406. [In Russian.]
- bq. GEFTER, V. A., 1952.—[Experimental study of the role played by reservoirs in the epidemiology of ascariasis.] [Abstract of thesis.] 6, 406-407. [In Russian.]
- br. ZASKIND, L. N., 1952.—[Helminthiases of geese and their causal agents.] [Abstract of thesis.] 6, 407-409. [In Russian.]
- bs. KANGINA, K. I., 1952.—[Nitrogen metabolism and amino acid composition of the protein of intestinal helminths. (*Ascaris suum* and *Moniezia expansa*.)] [Abstract of thesis.] 6, 409-411. [In Russian.]
- bt. OLIGER, I. M., 1952.—[Parasite fauna of woodcocks of forest zones of the European part of RSFSR.] [Abstract of thesis.] 6, 411-412. [In Russian.]

Cryptogoniminae Ward, 1917 is subdivided into two new tribes, Cryptogonimeae for *Cryptogonimus* and *Caecincola* and Neochasmeae for *Neochasmus* and *Allacanthochasmus*. Siphoderinae Manter, 1934 is also subdivided into two new tribes, Siphoderea for *Siphodera*, *Siphoderina* and *Centrovarium*, and Paracryptogonimeae for *Paracryptogonimus*, *Biovarium* and *Siphoderoides*. [The abstract of the thesis does not give any definitions of the new taxonomic groups but the author contributes these to "Trematodes of Animals and Man" Volume 6. For abstract see No. 1000 below.]

R.T.L.

G.I.P.

(961bp) This abstract of a thesis states that it deals with the distribution of *Capillaria* disease in birds in Russia where 29 species of *Capillaria* are known to occur; their morphology, biology, epizootology, classification and prophylaxis are reviewed. The most widespread and pathogenic are *C. columbae* and *C. caudinflata* in poultry, *Eucoleus contorta* in ducks and *C. anseris* in geese. A key is provided for the differentiation of the genera *Eucoleus*, *Thominx* and *Capillaria*.

R.T.L.

G.I.P.

(961bq) This thesis deals with the significance of a large river in a large sewered town, the various stages of pollution with helminth eggs, the process of self purification and the survival time of *Ascaris lumbricoides* eggs. The relevant literature is analysed.

R.T.L.

G.I.P.

(961br) This abstract of an unpublished thesis states that Soviet and other literature on the helminths of wild and domestic geese is collated, that it also contains a review of their systematics, biology, diagnosis, therapy and prophylaxis, and original descriptions of several species [not mentioned in the abstract]. Both *Capillaria anatis* and *C. anseris* have been found in the domestic goose which is now recorded as a new host for *Apatemon gracilis*.

R.T.L.

G.I.P.

(961bt) Oliger gives a description of the parasitic fauna of woodcocks of the forest zones of European RSFSR and discusses their role in the fluctuation of the numbers of birds. In the 531 birds examined there were 38 species of parasites of which six are stated to be new and of these four are new helminths. They are named *Corrigia bonasia* n.sp., *Choanotaenia sylvorum* n.sp. and *Leucochloridium tetrastae* n.sp. from the hazel grouse, and *Trichostrongylus medius* n.sp. from the woodcock.

R.T.L.

G.I.P.

962—Trudi Zoologicheskogo Instituta. Akademii Nauk SSSR.

- a. POLYANSKI, Y. I., 1952.—[Some new and little known parasitic nematodes from the intestines of marine fish.] 12, 133-147. [In Russian.]

(962a) From fish from the Berents Sea, Polyanski gives a detailed description of three new species and of the males and females of *Ascarophis morrhuae* Van Beneden, 1871. *A. arctica*

n.sp., from the intestine of *Zoarces viviparus*, differs from *A. morrhuae* in having less developed cuticular spines, eggs with two polar plugs and numerous filaments, and in the shape of the male spicule which is expanded and indented. *A. filiformis* n.sp., from the stomach of *Gadus morrhua*, is differentiated from the two above species by its larger measurements, its smaller male spicule and the absence of cuticular striations. The ovum, like that of *A. morrhuae*, has one polar plug with two filaments. *Capillaria salvelini* n.sp., from the intestine of *Salvelinus alpinus*, is separated from all other species of this genus except *C. coregoni* by its spicule which is proximally thickened and surrounded by a coiled, spring-like structure; *C. coregoni* is smaller, has smaller eggs and a different relative length of the oesophagus and the post-oesophageal part. Polyanski finds great similarity between *Ascarophis* (misquoted by Nicoll, 1907, as "*Ascaropsis*") and *Capillospirura* Skryabin, 1924 and therefore considers *Capillospirura* to be a synonym of *Ascarophis*. G.I.P.

963—Türk Veteriner Hekimleri Derneği Dergisi.

- a. TINAZ, A., 1952.—"Kalbin sol atriumu üzerinde ve sol boyun adaleleri arasında *Cenurus cerebralis*." 22 (64/65), 27-30. [English summary p. 30.]
- b. MIMIOGLU, M., 1952.—"Ankara'nın sokak kedileri üzerinde yaptığımız bir araştırmada müşahede ettiğimiz bir *Opisthorchis felineus* Rivolta, 1885 (karaciğer keleşbeği) olayı." 22 (66/67), 75-79. [English & German summaries pp. 77-78.]
- c. OYTUN, H. S., 1952.—"Saint-Denis Kimya Fabrikasının phenothiazine ilâciyle, memleketimiz çeşitli evcil hayvanlarında, yaptığımız deneylerin sonuçları." 22 (68/69), 133-139. [English summary p. 139.]
- d. GEDİZ, C., KUMOVA, C. & ACAREL, M., 1952.—"Bir katırın kamera okulu anteryörü hümmör aközünde *Setaria equina* Abildgaard 1789." 22 (70/71), 199-204. [French & German summaries pp. 203-204.]

964—Věstník Československé Zoologické Společnosti.

- a. ERHARDOVÁ, B. & RYŠAVÝ, B., 1952.—"*Skrjabinema ovis*, Vereščagin, 1926 (Oxyurata, Syphaciinae)." 16 (1/2), 195-196. [German & Russian summaries pp. 195-196.]
- b. VAVROUŠKOVÁ, K., 1952.—"Barvoměna pijavky *Protocleipsis tessellata* (O.F. Müller)." 16 (3/4), 334-353. [German & Russian summaries pp. 348-352.]

(964a) The occurrence of *Skrjabinema ovis* in goats in the neighbourhood of Roznava is briefly reported. R.T.L.

(964b) The colouration of *Protocleipsis tessellata*, in addition to the colouration of the connective tissue, is due to four types of chromatophore cells with processes in which pigment granules move centrifugally or centripetally. There are smaller chromatophores with red-brown pigment in the subepidermal network. The segment spots are formed by small groups of orange-yellow chromatophores situated somewhat deeper with processes which form a fine subepithelial network. There are larger chromatophores deeper in the connective tissue; these are red-brown in colour and still deeper there are green chromatophores. In the light the leech is usually green. In the dark it is light and transparent. The colour change depends on the concentration and dispersal of the pigment. The dispersal which causes a darkening in colour is probably a primary reaction of the chromatophores acting as photoreceptors. With an increase in light intensity the pigment granules pass from the centre to the processes of the chromatophore cells. Sodium chloride and alkaloids cause the pigment to concentrate. As extracts of lightly coloured or of dark leeches have no effect it is unlikely that the body fluid influences the concentration or dispersal of the pigments. R.T.L.

965—Veteriner Fakültesi Yayınları. Ankara Üniversitesi.

- a. AKMAN, S., 1952.—"Tek turnaklı hayvanların bağırsaklarında yaşayan askaritlere karşı en müessir ilâcın araştırılması." 21, Çalışmalar 5, 131 pp. [German summary pp. 128-131.]

(965a) Akman gives his observations on the results of treating small and varying numbers of equines with ten different anthelmintics (including carbon disulphide, carbon tetrachloride, chenopodium oil and santonin) for ascarid infection. R.T.L.

966—Western Fruit Grower.

- *a. ALLEN, M. W., 1952.—“Nematode parasites of trees and vines.” 6 (2), 33-37.

967—Wissenschaftliche Zeitschrift der Martin-Luther-Universität Halle-Wittenberg.

- *a. HARTWICH, G., 1952.—“Vergleichende mikroskopisch-anatomische Untersuchungen über den Kopfbau einiger Ascariden.” Mathematisch-naturwissenschaftliche Reihe No. 3, 1 (4), 71-83.

968—Zdravstveni Vestnik.

- a. VODOPIVEC, S., 1952.—“Razširjenost in zatiranje trakuljavosti v LRS.” [Distribution and control of tapeworm infection in Slovenia.] 21 (11/12), 223-228.

969—Zentralblatt für Chirurgie.

- a. ERHART, K. H., 1952.—“Verstopfung einer Duodenalsonde durch einen Spulwurm.” 77 (48), 2388-2389.
b. ZYLKA, N., 1952.—“Pathologische Veränderungen der Mesenteriallymphknoten bei Askariadiosis.” 77 (50), 2442-2450.

NON-PERIODICAL LITERATURE

- 970—AMELUNG, H., 1952.—“Untersuchungen über die Verteilung der Muskeltrichinellen im Tierkörper sowie über die Invasionsfähigkeit jugendlicher Trichinellen.” Dissertation, Hanover, 36 pp.

Amelung's experiments with guinea-pigs show that there is some correlation between the number of *Trichinella* larvae ingested and the number of larvae found in the muscles. The first larvae were found in the muscles twelve days after infection and larvae were found in the heart up to at least the 25th day. Coiled larvae were present after 18 days; encapsulation was completed after about the 60th day. Larvae can be infective from the 15th day and infection was obtained in 60% of guinea-pigs with larvae not more than 25 days old. In Amelung's view all *Trichinella* larvae, from the very youngest infective stage, can be identified with certainty by the trichinoscope.

A.E.F.

- *971—BENBROOK, E. A., 1952.—“List of parasites of domesticated animals in North America.” Minneapolis: Burgess Publishing Co., 2nd edit. (revised), 63 pp.

- *972—BIKHOVSKAYA-PAVLOVSKAYA, I. E., 1952.—[The parasitological study of fishes.] Moscow: Izdatelstvo Akademii Nauk SSSR, 62 pp. [In Russian.]

- 973—BINGEFORS, S., 1952.—“Nematode resistance in clover and lucerne.” International Grassland Congress (6th), State College, Pennsylvania, 1952. Proceedings, Vol. 2, pp. 1591-1596.

A short review of earlier work on breeding for resistance to *Ditylenchus dipsaci* in clover and lucerne is given. Breeding has resulted in such strains as Merkur red clover in southern Sweden, F.A.V. San Martin lucerne in Argentina, and Nemastan lucerne in the U.S.A. Investigations in Sweden have shown that it is possible to obtain a rapid improvement in resistance in local adapted strains of red clover by selection, and that crossing with resistant but not adapted strains has also given good results. An artificial infection method has been worked out. The most important cause of the resistance of certain plants seems to be the repression of development of the nematodes in such plants. The inheritance of resistance has also been studied.

S.B.

*974—BLAISDELL, K. F., 1952.—“A study of the cat lungworm *Aelurostrongylus abstrusus*.” Thesis, Cornell University, 181 pp.

*975—CARPENTER, M. F. P., 1952.—“The digestive enzymes of *Ascaris lumbricoides* var. *suis*: their properties and distribution in the alimentary canal.” Dissertation, University of Michigan, 399 pp.

Carpenter has studied the enzymes in the gut of *Ascaris lumbricoides* from pigs and has demonstrated the presence of an amylase which is activated by chloride, a maltase, a proteinase and at least four peptidases; lipase and esterase were also demonstrable. All the enzymes showed the greatest activity in the anterior region of the gut. The properties of the *Ascaris* amylase, maltase and proteinase differed from those of the equivalent enzymes of the pig. In order of activity the enzymes are peptidases, proteinase, maltase, lipase, amylase. [Based on an abstract in *Biol. Abstr.*, 27 (4), No. 11071.] S.W.

*976—DESANLIS, J., 1952.—“Propagation des parasites et des germes infectieux par les pailles et les fourrages secs.” Thesis, Alfort, 75 pp.

977—DIAS, C. B., 1952.—“A síndrome hepático-esplênica na esquistossomíase mansônica. Contribuição ao seu estudo, baseada em 22 casos clínicos, dos quais 13 submetidos à esplenectomia.” Thesis, Belo Horizonte, 449 pp. [English summary pp. 421-430.]

Dias has investigated 22 cases of schistosomiasis mansoni and deals with the pathological effects of the disease on the liver and spleen and the changes in the blood and in the liver function which followed early splenectomy in 13 cases. R.T.L.

*978—DÖLL, W., 1952.—“Die Bedeutung der *Pseudomonas hirudinis* für die Verdauungsphysiologie des medizinischen Blutegels.” Dissertation, Marburg.

*979—FREYTAG, K., 1952.—“Über die Bakterienflora der Haut und der Segmentalorgane von *Hirudo officinalis* und *medicinalis*.” Dissertation, Marburg.

980—FURCHNER, H. O., 1952.—“Über die Lebensfähigkeit von Askarideneiern in Hauskläranlagen.” Dissertation, Munich, 45 pp.

Furchner reports on a series of experiments carried out to determine whether *Ascaris* ova remain viable and infective in septic tanks and other small sewage plants. Ova of *Toxocara canis*, *Parascaris equorum*, *Ascaris lumbricoides* (human and pig strains), and *Neascaris vitulorum*, were used in the experiments but no differences in the behaviour of the varying species were noted. While the number of ova which embryonated after five months in sewage varied between 10% and 80%, practically all ova were destroyed by the 11th month. Furchner also reports on tests made on embryos from the sewage; he was unable to produce experimental infection in mice. He concludes that the use of sludge from septic tanks as garden manure is likely to spread *Ascaris* infection. A.E.F.

*981—GOODMAN, J. D., 1952.—“Taxonomic studies on the family Ochetsomatidae Leão, 1944, and the life history of *Stomatrema guberleti* Byrd, 1937. Trematoda.” Dissertation, University of Michigan, 322 pp.

In this review of the Ochetsomatidae, Goodman replaces the Leptophyllinae with Travrematinae nom.nov. Macroderinae nom.nov. [n.subf.?] is established for *Macrodera* and *Natriodera*. *N. verlatum* Talbot, 1934 is transferred to *N. variabilis*. The synonymy of species of *Lechriorchis*, *Neorenifer*, *Ochetosoma* and *Renifer* is discussed. *Dasymetra nicolli* is transferred to *D. natricis* n.comb. *Ochetosoma lampropelti* n.sp., *O. rauschi* n.sp. and

Pneumatophilus tracheophilus n.sp. are listed [but not described in the abstract]. The first intermediaries of *Stomatrema guberleti* are *Physa* spp., the second intermediaries are *Amphiuma* and *Siren* and the definitive host is the mud-snake *Farancia*, the adult worms being found in the mouth and oesophagus. Details of the life-history are given. [Based on an abstract in *Biol. Abstr.*, 27 (5), No. 14465.] S.W.

*982—HUNT, J. S., 1952.—“The life-history of *Gorgodera vivata* n.sp. (Trematoda: Gorgoderidae).” Dissertation, University of Michigan, 149 pp.

Hunt found more than 9% of 14,761 fingernail clams (*Sphaerium simile*) collected in the vicinity of Ann Arbor to be infected with cercariae of a new trematode, *Gorgodera vivata* n.sp. The larvae and nymphs of a number of aquatic insects became infected by ingesting the cercariae, and metacercariae developed. When the metacercariae were fed to frogs, *Rana clamitans* and *R. catesbeiana* became infected, sexually mature worms developing, but *R. pipiens* and *R. palustris* were refractory. [Based on an abstract in *Biol. Abstr.*, 27 (5), No. 14466.] S.W.

983—INTERNATIONAL CONGRESS OF ENTOMOLOGY (9th), Amsterdam, August 17–24, 1951. Transactions.

- a. THÉODORIDÈS, J., 1952.—“Contribution à l'étude écologique des parasites et commensaux de Coléoptères (2e note).” Vol. I, pp. 454–459. [Discussion p. 458.]
- b. GORDON, R. M., 1952.—“Problems in the transmission of filariasis.” Vol. I, pp. 939–945. [Discussion p. 945.]
- c. BERTRAM, D. S., 1952.—“Factors affecting the efficiency of the mite-vector of cotton rat filariasis.” Vol. I, pp. 951–955. [Discussion p. 955.]

(983a) Théodoridès summarizes the different biological and oecological aspects of parasitism and commensalism associated with the Coleoptera and annotates and tabulates the various fungi, protozoa, nematodes, acarines and insects found. The degree of association ranges from simple phoresis to endoparasitism and depends to a large extent on the oecology and ethology of the host. R.T.L.

(983b) As in yellow fever and some rickettsial and spirochaetal diseases, certain forms of filariasis may be partially maintained by arthropods which rarely or never bite man but feed on other animals. Chimpanzees may act as reservoirs of *Acanthocheilonema perstans* and monkeys of *Loa loa*. Gordon briefly summarizes recent observations on the uptake of *Loa loa* by its vector, its development in the vector, the chances of its transfer to the vertebrate host and the deposition of the parasite by the vector. With one exception members of the research unit working in West Africa developed Calabar swellings. Dimethyl phthalate gave protection from Chrysops for two hours. In the discussion, Galliard stated that 50% of the aboriginal tribes (Mois) in Indo-China were infected with *Wuchereria bancrofti* but showed no apparent symptoms, whereas only 7% of the Indo-Chinese carried infections but clinical cases were numerous. R.T.L.

(983c) The magnitude of the infection and the multiplicity of reinfection of the cotton-rat affect the readiness with which *Bdellonyssus bacoti* becomes infected by *Litomosoides carinii*. Environmental conditions prevailing during the infecting meal can affect considerably the ultimate infection rate in the mites. R.T.L.

984—KÄMPFE, L., 1952.—“Rüben- und Kartoffelälchen.” Leipzig: Neue Brehm-Bücherei, No. 80, 42 pp.

Kämpfe gives a full, illustrated account of the life-history, development and morphology of the sugar-beet and potato-root nematodes, describing the effects on their hosts. He deals briefly with control measures including chemical and biological control and crop rotation. M.T.F.

- 985—KELLER, H., 1952.—“Zusammenhang der Lebertuberkulose mit Leberegelbefall.” Dissertation, Munich, 44 pp.

The incidence of liver-fluke among cattle slaughtered at Regensburg rose from 8.3% in 1945 to 20.9% in 1949; over the same period tuberculosis of the liver increased from 4.7% to 14.8%. In order to study the relationship between the two infections Keller examined 73 slaughtered cattle during 1951 and 1952. Of 41 animals infected with liver-fluke, seven had tuberculosis of the liver while only one animal out of 32 free from liver-fluke had tuberculosis of the liver. From these figures Keller concludes that liver-fluke infection in cattle favours the development of liver tuberculosis. He recommends further research on this problem. A.E.F.

- *986—KOESLING, G., 1952.—“Verbreitung parasitärer Tierkrankheiten im Stadt- und Landkreis Braunschweig.” Dissertation, Giessen, 35 pp.

- *987—KOLLIGS, A., 1952.—“Verbreitung parasitärer Tierkrankheiten im Kreise Geilenkirchen-Heinsberg.” Dissertation, Giessen, 47 pp.

- 988—KRUEDENER, R. VON, 1952.—“Über die Ursachen der Aufwärtswanderung von *Bacterium coli* bei Rindern mit Leberegelbefall.” Dissertation, Munich, 56 pp.

Kruedener concludes from his researches that the primary cause of the upward migration of *Bacterium coli* to the duodenum in cattle infected with liver-fluke is the presence of the liver-fluke, although the symptoms are produced by the migrating bacteria. He considers that in other infections the position is reversed and that it is the presence of *B. coli* which causes favourable conditions for their development. Control of liver-fluke disease in cattle should reduce the incidence of *B. coli* infection. A.E.F.

- *989—MÜNCH, K., 1952.—“Der Kapillarienbefall des Geflügels, insbesondere der Hühner.” Dissertation, Giessen, 38 pp.

- 990—MULZER, B., 1952.—“Über die Technik der intratrachealen Lungenwurmbehandlung beim Schaf unter besonderer Berücksichtigung der Flüssigkeitsverteilung in der Lunge und ein Hinweis auf die Aerosoltherapie.” Dissertation, Munich, 37 pp.

After a detailed study of the technique of intratracheal injections against lungworms in sheep, Mulzer concludes that 88%–90% of large lungworms are reached when injection is made with the sheep lying on its back on a board at an angle of 40°. If this injection is preceded by one in the sitting or standing position up to 95% of the large lungworms should be reached. Mulzer does not consider intratracheal injections to be efficacious against small lungworms. The paper concludes with a note on the use of aerosols which are thought worthy of further study. A.E.F.

- *991—NAJIM, A. T., 1952.—“Life-history of *Gigantobilharzia huronensis* Najim, 1950, a dermatitis-producing bird blood-fluke 1 (Trematoda—Schistosomatidae).” Dissertation, University of Michigan, 99 pp.

Najim found *Physa gyrina* to be the intermediate host of *Gigantobilharzia huronensis*, and *Spinus tristis tristis* and *Richmondia cardinalis* to be natural definitive hosts. In the laboratory canaries and chicks were readily infected. The eggs are spheroid and spineless and hatch rapidly in water; the miracidium has 22 epidermal plates in four rows, with a wide gap between the second and third rows; the mother sporocyst is elongate and sac-like with a birth pore, and the anterior end of the daughter sporocyst is covered with spines; the cercaria is apharyngeate, spiny, with a bifurcate tail and pigmented eye-spots. Cercariae are shed as early as 24 days after infection of the snails and eggs appear in the faeces of the final host about 31 days after exposure to cercariae. The adult schistosomes are suckerless and filiform with the females considerably longer than the males. [Based on an abstract in *Biol. Abstr.*, 27 (5), No. 14469.] S.W.

- *992—PARAMONOV, A. A., 1952.—[Parasitic worms (helminths) of animals and plants and their control.] Moscow: Moskovskoe Obshchestvo Ispitatelei Prirodi, 111 pp. [In Russian.]
- *993—PARRISIUS, G., 1952.—“Der Endoparasitenbefall bei Ziegen in verschiedenen Gegenden unter Berücksichtigung der jeweiligen Umweltfaktoren.” Dissertation, Berlin.
- *994—PAVLOV, P., SEMERDZHIEV, P., NIKOV, S. & DIMITROV, N., 1952.—[Diseases of sheep and goats (infectious and parasitic diseases, avitaminoses, and forage poisonings).] Sofia: Zemizdat, 543 pp. [In Bulgarian?]
- *995—POGGE, H., 1952.—“Die Komplementbindung zur Feststellung der Trichinose bei Tieren, insbesondere bei Schweinen und über die Anwendbarkeit der Reaktion mit Schweineseren im allgemeinen.” Dissertation, Giessen, 61 pp.
- *996—REICHENOW, E., VOGEL, H. & WEYER, F., 1952.—“Leitfaden zur Untersuchung der tierischen Parasiten des Menschen und der Haustiere.” Leipzig: J. A. Barth, 3rd edit., 297 pp.
- *997—RILEY, W. A. & WALLACE, F. G., 1952.—“Introduction to the study of animal parasites and parasitism.” Minneapolis: Burgess Publishing Co., 6th edit., 94 pp.
- *998—ROHRBECK, E., 1952.—“Strongylidenbefall und Rennleistung bei Traberpferden.” Dissertation, Berlin.
- *999—SCHMIDT, J., 1952.—“Untersuchungen über den Kartoffelnematoden.” In: Pflanzenschutztagung in Berlin, March 12–14, 1952. Deutsche Akademie der Landwirtschaftswissenschaften, Berlin. Biologische Zentralanstalt, pp. 49–53.

1000—SKRYABIN, K. I., 1952.—[Trematodes of animals and man. Principles of trematodology. Volume VI.] Moscow: Izdatelstvo Akademii Nauk SSSR, 759 pp. [In Russian.]

The sixth volume of Skryabin's "Trematodes of Animals and Man" systematically surveys Aspidogastrea, Heterophyoidea and Microphallidae. Each taxonomic unit is defined. There are a number of keys, numerous sets of illustrations in the text and extensive lists of references. The following new data are incorporated. In the Aspidogastrea, the subgenus *Multicalyx* Faust & Tang, 1936 is raised to generic rank. In the section on Heterophyoidea (which is contributed by Morozov), Cryptogonimidae is enlarged by the addition of Haplorchoidinae n.subf. (for *Haplorchoides*) and Acetodextrinae n.subf. (for *Acetodextra* and *Pseudexorchis*). In 1952 [for abstract see above No. 961bn] Morozov subdivided Siphoderinae into Siphoderea and Paracryptogonimea. A third tribe, Iheringtrema, is now added for *Iheringtrema* Travassos, 1947. Siphoderea is enlarged by the inclusion of the genera *Exorchis* and *Metadena*. These three tribes are distinguished from one another by the position of the vitellaria in the body. In Paracryptogonimea they occupy a limited space in the anterior or medium third, in Siphoderea they lie in the anterior third and in the Iheringtrema they reach from the pharynx to the posterior portion of the body. The section on Microphallidae is by Belopolskaya. *Endocotyle incana* n.g., n.sp. in *Tringa incana brevipes* is added to Microphallinae. *Spelotrema oedemia* n.sp. from *Oedemia fusca deglandi* differs from *S. pygmaeum* in the size of the seminal vesicle which is 0.037×0.025 mm.; the uterus occupies the posterior quarter of the body and runs parallel to its posterior edge and the eggs are flattened anteriorly. *Monocoecum bariurum* is transferred to *Microphallus* as *M. bariurus* n.comb.; *Spelophallus primas* and *Paraheterophyes pirum* are transferred to *Spelotrema* as *Spelotrema prima* n.comb. and *S. pirum* n.comb. New additions to Maritreminae are *Pseudomaritrema postleicithale* n.g., n.sp. in *Tringa incana brevipes*, *Numeniotrema musculosa* n.g., n.sp. in *Nunemius phaeopus variegatus*, and *Diacetabulum curvicolon* n.g., n.sp. in *T. incana brevipes*.

These three new genera have the following characteristics: in *Numeniotrema* one loop of the uterus is situated between the seminal vesicle and the intestinal branches; in *Pseudospeliotrema* the vitellaria meet in the middle line, form a loop between the testes and send two follicular branches towards the sides of the body; in *Diacetabulum* there are two ventral suckers. *Maritrema* sp. of Afanasev, 1941 is now named *M. afanassjewi* n.sp. *M. magnicirrus* n.sp. is recorded from *Upupa epops* but not differentiated from allied species. [Each of the new genera, new species and new combinations in the Microphallidae is attributed to Belopolskaya, 1952 and in Galactosomatidae *Sobolephyia oshmarini* Morozov, 1952 is entered but it is not clear if these are the first descriptions of them.]

R.T.L.

G.I.P.

1001—SKRYABIN, K. I., 1952.—[Trematodes of animals and man. Principles of trematodology. Volume VII.] Moscow: Izdatel'stvo Akademii Nauk SSSR, 762 pp. [In Russian.]

Volume 7 of Skryabin's "Trematodes of Animals and Man" deals with Cephaloporidae, Monodharmidae, Dicrocoeliidae and Gorgoderidae. The section on Dicrocoeliidae is by Skryabin & Evranova but incorporates a number of new genera, species, subspecies and new combinations proposed by others. Oshmarin is responsible for *Pancreatrema disacetabulum* n.g., n.sp. (type species) from *Eurystomus orientalis*, *Praeorchitrema praearchis* n.g., n.sp. (type species) from *Capella gallinago*, *Unilaterilecithum beloussi* n.g., n.sp. (type species) from *Pericrocotus roseus*, *Brachylecithum capilliformis* n.sp. from *Turdus dauma*, *B. coturnixi* n.sp. from *Coturnix coturnix*, *B. cuculi* n.sp. from *Cuculus canorus*, *B. pici* n.sp. from *Picus canus*, *B. praetenuis* n.sp. from *Apus pacificus*, *B. attenuatum parinum* n.subsp. from *Parus palustris*, *B. lobatum strixi* n.subsp. from *Strix uralensis*, *Corrigia separatiorchis* n.sp. from *Actitis hypoleucos*, *Dicrocoelium moschiferi* n.sp. from *Moschus moschiferus*, *Skryabinus lanciformis* n.sp. from *Falco subbuteo* and *Lyperosomum mosquensis cineli* n.subsp. from *Circus pallasi*; he also makes the following new combinations, *Brachylecithum chivosca* (Pratt & Cutress, 1949) for *Olssoniella chivosca*, *B. colorosum* (Patwardhan, 1935) for *Lyperosomum colorosum*, *B. donicum* (Isaichikov, 1919) for *L. donicum*, *B. eophonae* (Yamaguti, 1941) for *L. eophonae*, and *B. lobatum glandarii* (Semenov, 1927) for *L. lobatum glandarii*. Evranova describes *Brachylecithum kirghisensis* n.sp. from *Montifringilla alpicola prosvirowi*, and *B. uigurica* n.sp. from *Eremophila penicillata albigua*. Kasimov supplies descriptions of *Dicrocoelium petrovi* n.sp. from *Alectoris graeca caucasica*, *Lyperosomum petrovi* n.sp. from *Francolinus francolinus*, and *L. schikhobalovi* n.sp. from *A. graeca caucasica*. *Lutztrema* sp. of Boyd, 1951 is named *Lutztrema sturni* n.sp. by Skryabin & Evranova. Pigulevski contributes the section on Gorgoderidae and divides *Gorgoderia* into five subgenera, viz., (i) *Gorgoderia* n.subg., type G. (*Gorgoderia*) *cynoides* Zeder, 1800, (ii) *Antoderia* n.subg., type G. (*Antoderia*) *amplicava* Looss, 1899, (iii) *Extremoderia* n.subg., type G. (*Extremoderia*) *australiensis* Johnston, 1912, (iv) *Medioderia* n.subg., type G. (*Medioderia*) *pagenstecheri* Ssnitzin, 1905, (v) *Postoderia* n.subg., type G. (*Postoderia*) *varsoviensis* Ssnitzin, 1905. He also divides *Petalodistomum* S. J. Johnston into two subgenera, *Petalodistomum* n.subg., type P. (*Petalodistomum*) *polycladum* S. J. Johnston, 1913, and *Staphylorchis* n.subg., type P. (*Staphylorchis*) *cymatodes* S. J. Johnston, 1913, and *Probolitrema* Looss, 1902 into *Probolitrema* n.subg., type P. (*Probolitrema*) *richiardi* Lopez, 1888 and *Reduxotrema* n.subg., type P. (*Reduxotrema*) *clelandi* T. H. Johnston, 1934. Pigulevski also contributes *Gorgoderia* (*Medioderia*) *pawlowskyi* n.sp. from *Rana* sp. and Artyukh is responsible for naming as a new variety *Dicrocoelium lanceatum sciuri* n.var. from a squirrel. The volume is illustrated by 263 line drawings and has comprehensive lists of references [but lacks a host-parasite list].

R.T.L.

1002—SKRYABIN, K. I., SHIKHOBALOVA, N. P., SCHULZ, R. S., POPOVA, T. I., BOEV, S. N. & DELYAMURE, S. L., 1952.—[Descriptive catalogue of parasitic nematodes. Vol. 3. Strongylata.] Moscow: Izdatel'stvo Akademii Nauk SSSR, 890 pp. [In Russian.]

In the third volume of Skryabin's "Descriptive Catalogue of Parasitic Nematodes" the Strongylata are surveyed by Skryabin, Shikhobalova, Schulz, Popova, Boev & Delyamure

as joint authors but various individuals are responsible for different sections and items. Formal definitions and differential keys are provided for the taxonomic groups. The species of each genus are arranged alphabetically with their synonymy, hosts, habitat and geographical distribution. The main text covers 890 pages including 289 pages of illustrations. There are also indexes of the genera and species mentioned in the volume and a bibliography of 1,433 titles. [Various subfamilies, tribes, genera and species are quoted as named by individuals in 1952 but there is no indication whether they are recorded here for the first time or taken from other publications not given in the list of references.] Popova, 1952, is or was responsible for: Chabertiinae n.subf., Zoniolaiminae n.subf. of Cloacinidae, and Sauricolinae n.subf. of Trichonematidae; the division of Trichonematinae into three tribes, Trichonematea, Cylindropharyngea, Gyaloccephalea; the division of Murshidiinae into three tribes, Murshidiinae, Pharyngostomylinae and Theileriinae; and for a revised definition of *Gelanostrongylus* Popova, 1952, type *Macropostrongylus macrostoma* Davey & Wood, 1938. Skryabin & Shikhobalova have created in 1952 a new family Ollulanidae and five new subfamilies Cheiropteronomatidae, Cooperiinae, Filarinematidae, Noctiinae and Oswaldocruziinae; they also add the following new tribes, viz., Filicapitea to Trichostrongylinae; Microstrongylea to Cheiropteronomatidae; Hyostrongylea and Trichohelicea to Cooperiinae; Stunkardionematea to Nematodirinae; and Viannaia, Viannellea and Pseudoheligmomostomatea to an emended Viannaiinae Neveu-Lemaire, 1934. Skryabin & Schulz, 1952 are responsible for a new subfamily Haemonchinae and make Longistriatinae a new subfamily in the Heligmosomatidae with two new tribes Longistriatea and Avellariaea. Skryabin & Shikhobalova add Acanthostrongylea, Heligmonellea, Murielea, Pudicea and Squamastrongylea and Schulz a further tribe Impalaia. *Heligmodontostoma* n.g. is proposed by Skryabin & Schulz for a species *H. microti* described by Schulz in 1929 from *Microtus* sp. [not traced]. Delyamure adds a new subfamily Halocercinae to the subfamilies of Pseudaliidae. Other apparently new records are: in Halocercinae, *Delamurella hyperoodoni* n.g., n.sp. Gubanov, 1952 from *Hyperoodon ampollatus*; in Heligmosomatidae, *Mammanidula asperocutis* n.g., n.sp. Sadovskaya, 1952 from *Sorex* sp.; here named for the first time *Spiculopteragia alcis* n.sp. Schulz, Kadenazii, Evranova & Schal'dybin, 1952 in *Alces alcis alcis*, *A. a. bedfordi* and *Capreolus capreolus*. *Skrjabinagia* Kasimov, 1942 (a subgenus of *Ostertagia*) is raised to generic rank by Altaev, 1952 who adds *S. dagestanica* n.sp. [not described] from *Ovis aries*. Skryabin & Schulz give *Oswaldocruzia goezei* as a new name for *O. filiformis* (Goeze, 1782) of Travassos, 1917, which they do not consider to be identical with Goeze's original species which is listed separately as *O. filiformis* (Goeze, 1782) sp. inq. Seven species catalogued under *Macropostrongylus* are transferred later in the volume to *Gelanostrongylus*. *Heligmosomoides travassosi* Schulz, 1926 and *Nematospira turgida* Walton, 1923 are transferred to *Heligmosomum* as new combinations.

R.T.L.

G.I.P.

- 1003—TAYLOR, E. L., 1952.—“Grassland management and parasitism.” In: Report of Proceedings. Conference on Metabolic Disorders and Other Problems Related to Grassland and Fodder Crops and Innovations in Animal Husbandry, London, November 20–21, 1952. B.V.A. Publication No. 23, pp. 112–120. [Discussion pp. 120–126.]

Taylor reviews recent work bearing on grassland management in the control of parasitism. He stresses the importance of subclinical infections and summarizes the work on host-parasite relationships of Gordon and Stewart in Australia, and of Michel and Morgan, Parnell & Rayski in Britain. He describes and discusses a striking instance in which the stock on a hill farm was increased two and three times without any special application of artificial fertilizers or seed mixtures, outlines the recent work on the relation of lung parasitism to fog fever and stresses the peculiar difficulties which the complexity of the oecological field presents to the veterinary practitioner.

R.T.L.

- *1004—TINER, J. D., 1952.—“A study of the epidemiology of ascarid nematodes in carnivores and rodents.” Thesis, University of Illinois, 130 pp.
- *1005—VOGEL, H. & MINNING, W., 1952.—“Wurmkrankheiten.” In: “Handbuch der Inneren Medizin”, edited by G. von Bergmann, W. Frey & H. Schwegk. Berlin: Springer-Verlag, 4th edit., Vol. I, Pt. II, pp. 784–1008.
- *1006—WACHEK, F., 1952.—“System und Biologie der entoparasitischen Tylenchiden.” Dissertation, Erlangen.
- *1007—WEINSHEIMER, P. A., 1952.—“Verbreitung parasitärer Tierkrankheiten im Kreise Daun.” Dissertation, Giessen, 35 pp.
- *1008—WERCKMEISTER, G., 1952.—“Die Inhalation mit Toluol und die intratracheale Injektion mit Äther-Toluol bei der Lungenwurmerkrankung des Rindes.” Dissertation, Hanover, 44 pp.
- 1009—WESENBERG-LUND, E., 1952.—“Acanthocephala.” In: Fridriksson, “Zoology of Iceland”. Vol. 2, Pt. 16, pp. 1–6.
- Acanthocephala have only once been recorded in Iceland. From a search of Icelandic material in the Zoological Museum, Copenhagen and in the Royal Veterinary and Agricultural College, Copenhagen, Wesenberg-Lund records four species: *Polymorphus minutus* in *Somateria mollissima*, *Corynosoma strumosum* in *Phoca vitulina* and *P. hispida*, *Bolbosoma porrigens* in *Megaptera boops*, and *Echinorhynchus gadi* in *Gadus callarias*. Holmes has recorded finding *Polymorphus* (*Profilicollis*) *?botulus* in a pond on Grimsey. *Bolbosoma turbinella* from *Balaenoptera borealis* was found in material in the Berlin Zoological Museum. S.W.
- *1010—WIEBE, J., 1952.—“Verbreitung parasitärer Tierkrankheiten im Landkreis Springe.” Dissertation, Hanover, 31 pp.

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NOTE

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In the Author Index there are no cross-references to show joint authorship, but authors of joint papers are listed individually. Thus, a paper by "Brown, B., Jones, A. & Smith, J." would have three separate entries, "Brown, B.", "Jones, A.", and "Smith, J."

In the Index of Subjects, alphabetization is under the first word (e.g. "*Acer* sp." before "*Acerina* sp."). Under the generic name of a helminth the following order is observed: papers on the genus as such; papers on undefined species; papers on new and defined species, e.g.

Capillaria
 — spp.
 — *aerophila*
 — *amarali* n.sp.

In cross-entries under names of hosts, the specific names of new species of helminths are omitted. *Anthelmintics* are listed under that word, under the name of the parasite or disease, and under the name of the host. *Nematicides* for plant eelworms are listed separately under that word and under the name of the parasite.

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